

# LIFE OF JOHN VIRIAMU JONES







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LIFE OF  
JOHN VIRIAMU JONES

' Let a man contend to the uttermost  
For his life's set prize, be it what it will !'

ROBERT BROWNING.

' For life, with all it yields of joy and woe,  
And hope and fear,—  
Is just our chance o' the prize of learning love,  
How love might be, hath been indeed, and is ;  
And that we hold thenceforth to the uttermost  
Such prize despite the envy of the world,  
And, having gained truth, keep truth ; that is all.'

ROBERT BROWNING.







*Emery Walker En. sc.*

*John Viriamu Jones*

*From a medallion by Sir W. Goscombe John R.A.*

*1902*

LIFE  
OF  
JOHN VIRIAMU JONES

BY  
KATHARINE VIRIAMU JONES

*WITH PORTRAITS*

LONDON  
SMITH, ELDER & CO  
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## PREFACE

THIS record of my husband's life and work is offered to his friends, students, and fellow-workers in response to a wish often expressed for a memoir and as a token of my gratitude for friendship bestowed.

My husband often spoke of the educational movement in Wales as 'an important chapter of history,' and said 'it is very difficult to form a true estimate of the importance of an historical movement passing in our own time and place. We are too much under the mountain to realise its size or to realise the grandeur of the whole. The genius of the historian has not had an opportunity of unravelling its meaning in relation to the time before and after.'

I have tried to give a sketch of the early years of the University College of South Wales and Monmouthshire and its development during the period of my husband's association with it, and of the events which led to the creation of the University of Wales.

Those who worked with him will appreciate the difficulties of preparing even an imperfect record.

His speeches have been, for the most part, taken from reports in the *South Wales Daily News* and the *Western Mail*.

My thanks are due to many friends for suggestions and help in writing the book; specially to Mrs. Home, Sir David Brynmôr-Jones, and Professor E. B. Poulton for

details of my husband's early life ; to Lord Kenyon and Principal T. F. Roberts, the Vice-Chancellor of the University of Wales ; to Mrs. Ayrton, Dr. R. T. Glazebrook, Professor Selby, and Mr. F. E. Smith for revision of Chapter IX ; to his colleagues and to some of his students : also to Miss K. Smith for the photograph of the medallion which is reproduced as the frontispiece.

K. V. J.

*June 1915*

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## PORTRAITS

JOHN VIRIAMU JONES . . . . . *Frontispiece*

*From a medallion by Sir W. Goscombe John, R.A., 1902.*

JOHN VIRIAMU JONES . . . . . *To face p. 219*

*From a photograph by W. D. Dighton, 1896.*

# LIFE OF JOHN VIRIAMU JONES

## CHAPTER I

### THOMAS JONES. VIRIAMU JONES' BOYHOOD AND YOUTH

The life, the spirit, and the work were one.—*Swinburne*.

Would we move the world, not earth but heaven must be our fulcrum.—*Browning*.

IN 'The Welsh People' by Rhÿs and Brynmôr-Jones, the following striking passages occur in the chapter on 'The Religious Movement':

In 1730 the Welsh-speaking people were probably as a whole the least religious and most intellectually backward in England and Wales. By 1830 they had become the most earnest and religious people in the whole kingdom; and in the course of their development had created powerful Nonconformist bodies stronger than those to be found in any other part of the country. . . . It was, in fact, the new birth of a people. It would be going too far to say that it created a new national character—that, of course, was impossible; but it profoundly changed and strengthened the mental and moral qualities of the Welsh-speaking people. In the highly strung and sensitive natures it produced a saintly type equal to any afforded by the literature or tradition of the Church. Among the people who, as a whole, threw themselves into the movement, it developed intellectual powers which may have before existed but which were only imperfectly utilised. It induced men who had never indulged in speculation to raise and discuss fundamental religious and philosophical problems, and stimulated to an extraordinary degree the argumentative and imaginative faculties of a naturally quick-witted race.

The leaders of this religious movement passed throughout the length and breadth of their land, teaching and

preaching, penetrating to the lonely country districts, and bearing light and knowledge to those who then sat in great darkness.

Such a man was Thomas Jones, the father of Viriamu Jones. Born at Rhayader on the Wye, in 1819, he grew up in the very heart of the religious movement. His ancestors were religious people, and he himself became the successor of Griffith Jones, Howell Harris, and Rowlands, the creators of the movement.

At one time his parents were in comfortable circumstances, but the flannel business in which his father was engaged became depressed, and, after the loss of his wife, he died, leaving Thomas (who was only four years old), and two brothers, one of whom was the father of the Rev. Morlais Jones,<sup>1</sup> orphaned and homeless.

Thomas Jones was brought up by his grandfather, a tenant-farmer of Cae-Newydd, whose ancestors had settled on a small freehold at Llandderw near Rhayader and had tilled the land for many generations; and it is to the period soon after his father's death that an event recorded by his son-in-law belongs.<sup>2</sup> When Thomas Jones was a very little boy, his grandfather took him one morning to the top of a hill at Rhayader and prayed that he might grow up to be a good man, and always do God's will with all his might. Then he told him that nothing else in the world was worth striving for but oneness with the Divine Spirit. With this grandfather he lived until he was twelve years old, attending the school at Rhayader, and when the time came he was apprenticed to a Mr. Winstone, a cloth weaver of Esgairmoel, near Llanwrtyd.

Mr. and Mrs. Winstone treated him like a child of their own, and it was under their care that he mastered Welsh; English had been the language spoken at Rhayader, although Welsh was used in the chapel services.

Mr. Winstone and his family were Calvinistic Methodists, and Thomas Jones accompanied them on Sundays to chapel and attended Sunday School, learning by heart each week

<sup>1</sup> Minister of the Lewisham Congregational Chapel.

<sup>2</sup> *Viriamu Jones and other Oxford Memories.* E. B. Poulton, F.R.S.



long chapters of the Bible and a lesson from the Calvinistic Methodist Catechism, the 'Instructor.' To the sermons he listened with keen attention, and, after returning home, would astonish his friends by declaiming large parts of them; but, though his elders evidently regarded him as unusually gifted, it was so little the custom of the day to take notice of children that he received small encouragement.

More than forty years later, when Thomas Jones was again at Llanwrtyd, some of the elder brethren asked him one night to the 'Society,'<sup>1</sup> where children still repeated Scripture texts. Suddenly recalling his own childhood there, he rose to address the children, pointing with his finger to the corner of the bench where he used to sit, and, turning to the aged deacon and others of his old friends, thanked them in tones of deep feeling.

When he was seventeen years old, his younger brother died. Overcome with sudden loneliness and misery, the boy escaped into the twilight, sank to the ground and 'wept his heart out.' When out-worn with grief, he lifted his eyes to the encircling mountains and suddenly took comfort: one day he might pass over them and be free.

From this time forth a feeling of discontent took possession of him and drove him a year afterwards to leave Llanwrtyd and follow his elder brother to the coal-mining district of Monmouthshire, where he worked as a hewer and check-weigher, and afterwards also in the offices of a colliery for two years, spending almost all his earnings on buying books. How much he loved the friends with whom

<sup>1</sup> The 'Society' or 'Society Meeting' (in Welsh 'Seiet'—a word derived from the Latin *societas*—a partnership or company) is strictly a meeting of Church members, i.e. those who have, according to the Trust Deed of the Voluntary Church, a right to take part in the management of its affairs. However, children of the members are allowed to be present, and strangers by consent. These latter take no part in the business transacted. The Seiet initiates the children into the Church, reviews sermons of the week, elicits religious experiences, admonishes the erring and, if necessary, excommunicates and expels a member guilty of scandalous conduct. It also manages ultimately the material concerns of the Church (*History of the Welsh People*. Rhys and Brynmôr-Jones, pp. 588-9).

he had lived six years we know by his leaving them silently in the dead of night to avoid the wrench of farewells.

For four years he remained in that district : it was at the time of the Chartist agitation. All his sympathies were with the Chartists, and, young as he was, at one of their meetings he attempted his first speech.

Of his outward or inner life during those four years we know little. Fresh from the very sheltered home at Llan-wrtyd, the rough mining world presented many temptations. It was a world of which he had had no knowledge or fore-warning ; and, it may be that, under the influence of his surroundings, he gave up his religious habits, and that ignorance of the possible temptations was to him, as to many others, an added danger, not a safeguard. At least this is the inference from a great sermon on ' Backsliding ' which he preached in later years as if it had been an appeal inspired by the memory of a bitter experience.

In 1839 he went to Llanelly in Carmarthenshire, having rejoined the Calvinistic Methodists, and began to deliver temperance addresses—humorous and resourceful ; there, too, he began to preach. Young as he was, he was already eager to qualify himself for the ministry, and from time to time he would address his fellow-workmen in their dinner-hour, having earned respectful hearing at one of these early preachings, when, descending from his temporary pulpit, he challenged an insolent interrupter to a fight, and taught him and his companions a lesson.

But he did not long remain a member of this body. A violent controversy had arisen concerning the Atonement and the Work of the Spirit. This moved him to reconsider his beliefs. He found that he could not subscribe to some of the doctrines in the ' Confession of Faith ' ; and the elders, therefore, rejected him, some pronouncing him ' worse than an infidel.' His more liberal views led him in 1841, when he was twenty-two years of age, to join the body of Independents, or Congregationalists, in which he worked and preached until his death.

Together with his friend and colleague, the Rev. Thomas Owen, he travelled at one time from place to place in Mid and North Wales, usually preaching twice a day.

Mr. Owen has described how Thomas Jones set out from Hermon and he from Penybanc—their meeting at Crugybar and subsequent journey together via Llanfair-clydog, Aberystwyth, Talybont, and Bala, till they reached Bangor for a great Whit-Sunday meeting. At one such ‘Cymanfa,’ the good people of the place were somewhat dismayed to find two young and unknown men were to preach on the first night, but their fears were soon allayed.

The same colleague tells us that at the opening of the Ebenezer Chapel at Aberdare in 1853, he preached perhaps the greatest of his sermons. He read his text swiftly but quietly: ‘Ask for the old paths.’ He then spoke rapidly and fluently, and held the congregation spellbound to the end, though his sermon lasted one hour and twenty minutes. ‘Cling to the old truths; worship in the old style; enjoy the old experiences; pray for the old influences; ask for the old paths.’ He showed how the Spirit of God had been the strength of the mighty, the inspiration of saints and heroes, of every achievement from age to age; and, recalling the religious observances of Wales in his own early years, he urged his hearers anew to pray for the old powers, for redemption from religious, moral, and social weakness and decay.

At Liverpool, in 1858, he preached upon the text: ‘The Lord, the Lord God merciful and gracious,’ in which he spoke of the unchangeableness of God, signified by His name ‘Jehovah,’ and the changeableness of all else. He told how as a lad he had visited his native place, an orphan and alone. The old folk he had known were gone; the companions he had loved were scattered. He walked the streets, but no one knew him: he was a stranger in his own city. He went to the house where he was born—where he first smiled in his mother’s face and climbed on his father’s knee—but all there were strangers to him. Going by night to the old churchyard, where the bodies of his parents had been laid to rest, he knelt by the green mounds

which marked their graves, in the silence of the moonlight ; and there, in his loneliness, his heart almost breaking with desire, he raised his eyes and beheld the encircling hills ranged as an army to defend him, just as when a child he saw them first ; and he heard a voice saying : ‘ I, the Lord, change not ; Jesus Christ, the same yesterday, to-day and for ever.’

Members of that congregation yet remember the tender minor cadences in which he spoke, followed by the sudden uplifting of his voice in the delivery of his message.

He had then attained his greatest influence as a preacher in Welsh. The strength of his character, the intensity of his emotional temperament, his intellectual grasp, his restrained and lofty eloquence, his tenderness for all weakness, won the admiration of his hearers. He had become a great force in Wales. His friend, the Rev. E. Griffith-Jones, Principal of the Independent College at Bradford, writes of him :

His wonderful exploits as a ‘ Cymanfa ’ preacher were very widely discussed by people during my early youth. He had the power of electrifying audiences in a manner that was perfectly magical ; and, though he became the foremost English (Nonconformist) preacher of his day, he never quite attained to the extraordinary magnetism as an orator which he possessed in his native language. Many years afterwards, I remember a conversation I had with an old man who, in his youth, was a member of Thomas Jones’s congregation at Tabor, in which he told me the method which the great preacher followed in the preparation of one of his ‘ Cymanfa ’ sermons.

Having chosen his text, he took several weeks to brood over it and gather materials. Then, having very carefully prepared and memorised the first half, he announced on the previous Sunday that he was going to preach the first half of his next great sermon, and asked the people to come out in force to hear him. This would take about an hour in delivery. Then he would set about preparing the second half, and when it was ready he would announce his intention of preaching it on the following Sunday. This, also, would take about an hour to deliver. Then he would condense and rearrange, omit or enlarge certain portions of the sermon, and then preach it in its totality, having now reduced its length to about an hour. Then the sermon would be ready for delivery on one of those great occasions when the whole population would turn out in



force from village and countryside to the preaching festival. By frequent repetition to such audiences as these, the discourse would gradually become more and more perfect from an oratorical and homiletic point of view, until at last it was a perfect instrument for the conveyance of the preacher's thought and appeal to his people.

This very careful and elaborate method of preparation was continued by him, in common with all the great Welsh Nonconformist preachers of his age, for many years.

But his energies were not to be confined to Wales. In 1858, the year of his great sermon at Liverpool, he was called to London; and for three years (from 1858 to 1861) at Albany Chapel, Regent's Park, and afterwards till 1870 at Bedford Chapel, Camden Town, his ministry attracted hearers of all classes and interests from every part of London. He knew that, with the advance of science, the consequent development of material benefits, and the fuller recognition of intellectual achievement, the message of the Church was in danger of neglect. It announced no new discoveries: its messengers themselves were rarely as well equipped for their calling as were the members of the other professions; while those who listened to theologians of a broader school, unable to reconcile the newer criticism with the hitherto accepted interpretation of the Scriptures, inferred that their spiritual inspiration must thereby be impugned.

Thomas Jones strove to meet the needs of thinkers and of doubters.

Let learned and able men, to whom God has given power, continue their intellectual efforts to remove the difficulties that stand in the way of faith; but the emphatic, clear and overwhelming answer of the Church must be moral and spiritual. Christianity was given in the divine life of the Son of God, and in and by the divine life of the Church it must be preserved.

That overwhelming, clear, emphatic answer was his continual theme. He found it in the Divine life of supreme love, majesty, and tenderness. That revelation, but dimly understood, changed all the values of life. It had power to redeem men from pettiness of self, to transform the



agony of loss, of trust deceived, of bitterest self-condemnation, to love, joy of service, and accepted sacrifice. To make this, his answer, clear to others, no effort was too great. He pleaded as he preached, with passionate urgency, in every tone of persuasion, with grace of language and prophetic fire, to save the well-to-do, the learned, and the cultured from the numbing influence of comfort, convention, intellectual pride; and the poor, not only from famine and degradation of squalor, but from the despair they breed—that darkness of the soul that knows no vision of compassion, has heard no echo of love's voice, divine or human.

When, then, he turned to English, says the Rev. E. Griffith-Jones, he carried with him the same painstaking method of initial preparation, and, though he did not repeat his sermons, as is the custom in the Welsh ministry owing to the itinerant method of preaching, yet the mental and oratorical discipline was conveyed into the new language, and his sermons were always wonderfully perfect in form and phrasing, as well as in the arrangement and disposition of his material.

Thomas Jones used to say to young preachers that if they prepared their sermons in this careful and painstaking manner until they were forty, writing every word beforehand and committing it to memory, as far as possible, they need not write a single word afterwards, because the mental discipline would stand them in such stead that they would be able to preach almost extempore and deal with their subjects effectively, both from the oratorical and practical point of view.

Dr. Hannay, who knew Thomas Jones and his work during the years he spent in London, speaking of the effect of his preaching upon English congregations, said that he made all present—

one in thought and feeling for the time by the enchantment of his words. It was the incantation of genius. But it was genius compelled to work, compelled also to be patient and humble in regard to what he understood not. Perhaps no man ever put more of conscience, more of work commanding every faculty he had, straining all his resources, into preparation for the pulpit than Mr. Jones did in the earlier years of his ministry in London.

And the secret of all this untiring labour was the conviction to which he attained in early manhood—that there was no work for a man in this world comparable with that of the ministry.<sup>1</sup>

Of his appearance as a preacher, Robert Browning, his friend and hearer, speaks :

The clear-cut Celtic features, the lips compressed as with the retention of a discovered prize in thought or feeling, the triumph of the eyes, brimful of conviction and confidence—these, no less than the fervency of faith and hope, were the orator's own.<sup>2</sup>

In 1877, seven years after his second marriage with Jane Howell, of Whitland, Pembrokeshire, Thomas Jones went to Australia—nominally, to benefit his health ; really, to spend his strength in the ministry of the Collins Street Chapel, Melbourne.

The separation from his elder children, especially from his daughter, the very change to new scenes—were sore trials to him. Even the voyage proved a severe ordeal ; nor did the climate of Melbourne, from the effects of which much good had been hoped, prove at all beneficial.

But his work went on with increasing fruitfulness. The people who, moved by what they had heard of him, had entreated him to come over and help them, thronged to listen to his sermons, could not find means enough to express their profound appreciation of this man who brought—and not to members of his own sect only—the supreme gift, the light by which to live when his own term was drawing to its close.

It was not in Melbourne only that Thomas Jones' influence was felt. From the first he would spend as much of the week as possible in up-country stations, enjoying the incidents of Bush life, and making as well as taking opportunities of addressing the settlers.

Two things in this life especially appealed to him—the yearly sheep-shearing and the firing of the scrub ; the last would be, if possible, put off by his kind hosts against his coming.

<sup>1</sup> *The Christian World*, July 1882.

<sup>2</sup> *The Divine Order, and other Sermons*. Introduction by Robert Browning, 1884.

One charming picture of him, smoking his long churchwarden and genially talking with the shearers as they played cards on a tree-stump, has been preserved. Small wonder that a pastor so human on weekdays found a flock ready to follow him on Sundays. Rough settlers would ride in forty miles from the Bush to hear him preach, and those who had once heard him never forgot it.

Some years after his death, his youngest son, Morlais Jones, then living with his brother at Cardiff, was travelling in the same railway carriage as some Welsh workmen, and heard the words : ' Jones Treforris,' and saw the speakers, strangers to each other, shaking hands with the eagerness of long-parted friends. Both had heard his father preach—the one in Melbourne, the other in South Wales—and, this bond discovered, the men were friends on the strength of it. Morlais Jones told them who he was, and heard the story of the unforgotten sermons, the memory of which had power to make his hearers friends for the preacher's sake.

But the strain of colonial life became too great. After three years of faithful and inspiring service his strength gave way. Many of his friends observed, on his return from Australia in 1880, that he had become old before his time. As he himself said, he had come home to rest a little and to die.

Soon after his return he was offered the ministry of the Congregational Church in Oxford ; and it was probably in connection with this offer that he came to spend one night with his son at 10a St. Giles, when Professor Poulton met him and heard, for the first and last time, ' the low, musical voice, with all its suggestion of power in reserve, like the rhythmic rush of the sea on a sandy shore, which was the chief external secret of his power over his hearers.' In spite of the temptation of the offer of work among young men, Thomas Jones went back to Swansea, took up again his ministry at the chapel in Walter Road, and for two years preached as regularly as his failing powers allowed.

The subject of the last sermon he tried to write was ' Obedience to Christ.' At the end of the unfinished manu-

script—writing of how men delay decision in the supreme issue, saying, ‘Oh, there is plenty of time to think of those things!’—he had added: ‘Time to think! Eternity is at hand!’ These were his last written words.

It was his wish that his body should be buried in the highest and windiest part of the Swansea cemetery, overlooking the bay.

The life and work of Thomas Jones in Wales and elsewhere may be regarded as the outcome of the great religious revival of the eighteenth century in Wales, which so profoundly affected the life of the Welsh people.

His private life was as lovable as his ministerial was earnest. The atmosphere of his home was so unconventional as to be almost bohemian. Side by side with an intellectual standard severe to the verge of austerity, as far as facts were concerned, side by side with a spiritual life not talked of but lived, went a play of wit and fancy, a delight in a detached and critical view of every topic, which made their home a centre of delight to these Welsh children. For all this loving intimacy, this freedom of discussion as on an equal footing, the parental authority was loyally obeyed. And Thomas Jones endured no gossip, no judgment of his neighbours. If good could not be spoken, then nothing must be said; and this rare habit of mind descended to his son.

When his older boys were going to school, and later in their college days, Thomas Jones used to give himself up to them in the evenings, discussing philosophy, literature, the questions of the day; and it was talk, brilliant, incisive, humorous, and earnest. As they talked, fallacies were exposed, arguments stripped bare of confusion in idea or exposition; and often, too, in this hour of quiet, he told them of his own experiences. Those talks with his father were among the most valued memories of Viriamu’s youth.

After the first educational meeting that Viriamu addressed in Cardiff, as speakers and audience were dispersing, some one pressed forward to congratulate him on his speech, saying that his eloquence and the flash of his

eyes recalled his father so vividly that he would have known him to be the son of Thomas Jones. No tribute could have given him greater encouragement or keener pleasure.

John Viriamu Jones, second son of the Rev. Thomas Jones, was born at Pentrepoeth, near Swansea, on January 2, 1856. His mother is described by her daughter<sup>1</sup> as being of slight build, with irregular features and pale but clear complexion, and a look that was wise, kind, and critical. From the same source we learn that the Sunday after her death Robert Browning 'came into the vestry after the service, put both arms round Papa, and, with tears in his eyes, spoke a few strong words of sympathy and understanding.'

Like his mother, Viriamu Jones had great strength of will and keen insight into character; his sustained enthusiasm and devotion to high ends and his very sensitive and gentle nature recalled his father. Like his father, too, he might have said 'he was a man who loved to be loved and who could not live in an unkind atmosphere.'

The name given to him suggested his parents' hopes, for 'Viriamu' was the name of the martyr-missionary, John Williams of Erromanga, rendered as best it could be in the Polynesian tongue.<sup>2</sup>

Viriamu's first years were passed in the small but busy colliery district of Morriston, afterwards in the north of

<sup>1</sup> *Viriamu Jones and other Oxford Memories.* E. B. Poulton, F.R.S.

<sup>2</sup> The following quaint verses are from a Welsh requiem hymn sung at a lecture by Thomas Jones on his friend's life :

Weep, weep, weep,  
Weep for the brave,  
Weep for the brave, the Soldier of the Cross  
Has entered Glory,  
Has entered Glory, but we mourn his loss.  
Weep for the brave,  
Weep for the brave,  
A Williams, a Williams, a Williams is no more ;  
And tears bedew,  
And tears bedew sad Erromanga's shore.

He stood on Tanna's strand  
And with prophetic fire,  
Told of the mighty band  
Would join th' angelic choir,  
And from the islands of the southern sea,  
Become the servants of th' Eternal Three.



London until 1870, in which year his father was called to Swansea. At the time of Viriamu's birth the family consisted of his eldest brother, David Brynmôr<sup>1</sup> and his sister Annie (now Mrs. Home). Three younger brothers—Irvonwy,<sup>2</sup> Leifchild,<sup>3</sup> and Morlais<sup>4</sup>—were born between 1858 and 1863.

Viriamu Jones' earliest memory was of an incident which he thought must have happened before he was three years old. His parents were living in Albert Street, Regent's Park. It was the hour when tradesmen's carts call for morning orders: the front door was open, and he strayed across the street alone. Next moment, a horse and cart drove up to his father's door, and, hearing his mother calling to him to return, he ran back the most direct way, straight under the horse's body.

His sister recalls the following two incidents: <sup>5</sup>

When we lived at Albert Street, Regent's Park, George Macdonald, whose house was lower down on the other side, told my father an amusing story of Vir. One day he saw him, then a small boy of five or six, come out of the house of the lady to whom we children went every day for a reading-lesson, then go boldly up to a man who was leading a donkey, and hold an earnest conversation with him. The next moment Vir was seated on the creature's back, riding proudly up the street. Fearing he might be stolen, Mr. Macdonald watched until Vir dismounted at his father's door. When questioned afterwards he said, 'I gave him my penny.' It was his weekly pocket-money: the days of spoiling children had not come.

I cannot date the following episode, but we must have been very young. Vir and I were walking to school together, when a tall butcher-lad remarked *en passant*: 'What a funny little girl—she laughs all over her face.' Vir flew at him, hammered his knees with clenched fists, crying out: 'How dare you speak so of my sister?' 'And a funny little boy, too,' the enemy sang out as I drew Vir away, pale with rage and calling passionately: 'He is a coward: he won't fight me!'

<sup>1</sup> The Rt. Hon. Sir David Brynmôr-Jones, K.C., M.P. for Swansea, 1895-1914; Recorder of Cardiff, 1914; Master in Lunacy of the Supreme Court, 1914.

<sup>2</sup> Irvonwy, who was drowned in Swansea Bay, August 20, 1886.

<sup>3</sup> Leifchild Stratten, M.P. for North Westmorland, 1905-10; Rushcliffe, Notts, 1910; President of the United Kingdom Alliance.

<sup>4</sup> Morlais Glasfryn, who became a consulting engineer, and died in 1905.

<sup>5</sup> *Viriamu Jones and other Oxford Memories.* E. B. Poulton, F.R.S.

One of the habits of the family was to read aloud after the mid-day dinner. In Viriamu's case this proved rather unfortunate. Always eager to give and share pleasure with others, the boy would hasten through his meal and, while the others were still contentedly eating their pudding, go to the bookshelf and take down the volume of Dickens. Long afterwards his step-mother expressed bitter regret that this had been allowed, for even as a schoolboy he suffered acutely from the malady which gradually became an invariable accompaniment of his work when done at high pressure.

Viriamu Jones' first school was Oakley House, Reading ; the master, Mr. William Watson, like most of those he taught, was a Nonconformist, and among his earliest pupils were Viriamu Jones and Professor E. B. Poulton. Professor Poulton remembers but little of his schoolfellow, except that he was active at games and clever. One incident, however, he says, made a deep impression upon him. There had been a quarrel between the two boys of which the cause is forgotten.

Vir withstood me and delivered a long impassioned remonstrance, arguing that he was being treated wrongly, unfairly. His schoolfellow was a sufficiently ordinary boy to persist in doing the wrong without saying much in his own defence, but he was in reality deeply impressed, and can now, after a lapse of five and forty years, remember Vir's earnest look and the spot in the school garden where he stood.

He was only eleven years old when he left Oakley House and went to University College School, while his father lived at Norwood, a period of which little or nothing is recorded ; but his father's removal to Swansea, in January 1870, entailed his leaving his London school and working for two years at the Normal College, Swansea, under Mr. Williams.

This institution was one of the first results of the nineteenth-century educational movement in Wales which began under Nonconformist influence and was opened for the training of teachers at Brecon in 1846. It failed in its original intention for lack of means and of material ;

but in the dearth of good secondary schools it supplied that need, first at Brecon and from 1851 in Swansea under the principal, Mr. Evan Davies, M.A., LL.D. (Glasgow), for some fifteen years, then under Mr. Williams, an M.A. of London. As a frankly Nonconformist school it became both popular and efficient, the pupils taking excellent places in the London Matriculation examination, then regarded as a standard examination for boys leaving school.

It was at this school that Viriamu achieved the earliest of his successes, being the first of five hundred candidates for the London University Matriculation examination. His family were delighted; but his three years' residence with his brother Brynmôr in London lodgings which followed was not good for his health. Never robust, he contracted the habit of overwork which was to lead to much physical suffering in later years. The facility<sup>1</sup> with which he worked and his strong desire to please his parents only increased the temptation.

He went to University College, London, in 1872, and worked there until he went to Oxford in 1876.

His parents felt his absence from home so much as to grudge every day spent away from them during his vacations, and their over-anxiety could scarcely be satisfied with such letters as he managed to write in term time. The following is an extract from a letter to his father, written when Viriamu Jones was beginning his career at University College, London:

*Nov. 7th, 1872.*—I have often during the last week wished I was at home for some reasons. Not till one is in pain does one know what a blessing it is to have sympathy and to be at home.

Seven years later (1879), after passing his Final Examination in Mathematics and while his father was still at Melbourne, he again thirsted for the rest of home.

<sup>1</sup> A curious illustration of this is recorded by his sister. When still at University College School, 'he would sit in the evening with his books before him, humming a popular air, keeping time with his fists or thumping the table or beating the floor with his heels. He seemed an idle, careless little vagabond, but we found that he was really intent upon his object and quite heedless of the buzz of talk around him, or of any word addressed to himself' (*Viriamu Jones and other Oxford Memories*. E. B. Poulton, F.R.S.).

I wish I had not made the Guernsey engagement so that I might have come to Swansea from Scotland, for—to tell truth—I am rather tired of motion, and Swansea is still home.

When he took his second B.Sc. and won the University Scholarship in Geology in the Honours examination of the London University, his stepmother expressed the family's approval and satisfaction (October 1875) :

Your note of this morning gave us all great pleasure. You sustain your first honours in a most splendid manner.

On Sunday we received the shabbiest of post-cards with nought on it but 'I am'—for which carelessness you will have to be scolded as well as praised when you come.

His fellow-student, Claude Thompson,<sup>1</sup> with whom he lodged in London, also took notice of his success (September 20, 1875) : 'What a howling swell at philosophy you have become !'

In February 1876, Mrs. Thomas Jones told him :

I read your verses to Annie with great pleasure and delight. There were some very fine compliments passed on you, which I will not give, since you constantly tell me not to endeavour to make you vain.

And again in March :

We were very glad to have your letter on Sunday morning. I am afraid the very orthodox folk would condemn us sadly—and I am not sure that I had no qualms on the subject—for the laughter your letter provoked. One after the other coming down, it was not enough for them to laugh, but they must needs read it aloud and then another hearty round would be the effect.

In March 1877, Irvonwy sent the family news :

Papa is in his usual health but in great trouble about leaving for Melbourne. Mr. Jenkins<sup>2</sup> and Mr. Yeo<sup>3</sup> are also rather cut up—they both insist that the Church shall be left open until our Father's return in three years. Papa of course does not agree to this.

<sup>1</sup> Claude M. Thompson, M.A., D.Sc., F.C.S., Professor of Chemistry at the University College of South Wales and Monmouthshire.

<sup>2</sup> Now Lord Glentawe, was a Deacon of the Walter Road Chapel, Swansea.

<sup>3</sup> The late Mr. Frank Ash Yeo, also a Deacon of Walter Road Chapel, Swansea ; represented the Gower division of Glamorgan in the Parliament of 1885.

From Melbourne, in August 1877, came a message from his father 'not to pay too much attention to rowing at the expense of your work.' His stepmother adds: 'Your career has hitherto been brilliant. Don't let it be flat at the end!'

His sister wrote in December 1877:

I trust you will get on well in the coming examination—indeed, you *must*, to sustain your reputation, although you seem to agree with Professor Huxley on the subject of competitive examinations.<sup>1</sup>

And his brother Brynmôr, who was already markedly successful on the South Wales circuit, on December 15, 1877:

Keep up your spirits over your examination and do as well as you can.

Work is not so brisk in these Halls—alas! and cheques are rarely seen!

And in February 1878, another message came through Mrs. Thomas Jones:

Your father desires me to say that he is *anxious* about the regularity of your work and is sorry he is so far away and not therefore able to advise you.

With deep anxiety this father watched and cared for the son who had inherited much of his own temperament. From Australia he wrote of the tenderness with which his thoughts brooded over the welfare of his children. He counselled his son as to his physical well-being and gave him practical advice to prepare him for life. He wrote also:

There are three standards by which to judge a man.

- (1) His faith in the invisible.
- (2) His manner of dealing with money in relation to himself and to Society.
- (3) His attitude towards his lower nature.

<sup>1</sup> Twenty-four years later, in *Nature*, June 13, 1901, Professor Ayrton said of Viriamu Jones: 'How he used to laugh because he knew exactly what an examiner wanted; and what a true estimate did he form of the poverty of the examination system to test a man's real powers.'



His children were devoted to him. Viriamu's first thought on hearing bad news of his father was to write to his sister :

I snatch a moment to write to you to ask you about yourself. I have been afraid you are not well. You must not be too anxious about Papa. The worst of his illness was over when Mamma wrote. I had hoped that no acclimatization illness would have followed a change to a climate so delicious as that of Melbourne ; but you must not be miserable because it is not so—time will set it all right.

When he was only eighteen and going in for the first B.Sc. examination he was seriously ill, as he wrote to his sister in August 1874 :

Thanks for your letter. You think possibly too much of my successes. The more I have the more humble I feel (this is a fact), but nevertheless I am glad that you are all pleased. I have some more news for you. Perhaps you know that I was up last week for the first B.Sc. examination. I was ill throughout it and could not cram, so had to go in as I was.

He did not add that his brother Brynmôr had had to take him to Sir John Williams,<sup>1</sup> on the morning before the examination was held, to be treated in such a fashion as to make it physically possible for him to get through the work. The letter continues :

And the result, I have heard to-day that I have passed first division. The Honours Examination comes on next week, and I have still a little work before me, but after that I am free. I have been down to Hastings for the last week. The change it has wrought in me is marvellous. I am so much better. I returned home this morning in time to hear that I had passed. I forgot to put that I came out fourth in Practical Chemistry.

Thus all through life his brain consumed his vigour. He gave himself little leisure. Deceived by a spiritual and intellectual exaltation, he presumed on Nature's mercy, hailing each respite as a cure, often hoping to find rest in change. Yet early in life and in relation to others he emphasised the importance of health. To his sister he wrote once :

<sup>1</sup> Sir John Williams, G.C.V.O., M.D.



I am very sorry to hear that Robert has been so unwell, but I trust that he is on the way to perfect restoration to health, the only state in which perfect felicity is possible to man.

The tendency to overwork was not lessened by the knowledge that his father counted no effort a sacrifice which might increase his children's happiness or welfare.

In November 1874, Viriamu was awarded a Brackenbury Mathematical Scholarship at Balliol, but did not go up to Oxford until 1876. In 1875, he passed the second B.Sc. examination in the University of London, obtained the University Scholarship in Geology,<sup>1</sup> and was second on the list and first in the second class in Logic and Moral Philosophy respectively; but it was the Balliol triumph, won when he was under nineteen, that really roused his family's enthusiasm.<sup>2</sup>

Papa, wrote his sister, read us out the good news while we were at supper. Picture the scene—Mama weeping at the head of the table and trying to look as if she were laughing; Mon (Irvonwy) with mouth open and eyes sparkling; Robert (Maine) thumping the table and saying 'By George!' Annie keeping Mama company in the dissolving line; and Papa, with the telegram in his hand, beaming all over.

It is a great thing for you, dear, to be able to reward Papa with such intense pleasure as he is now feeling.

There exists no record of the impression made by the most remarkable Oxford influence of his day upon the

<sup>1</sup> His competing for this was an afterthought, his gaining it evidence, not only of the ease with which he mastered a new subject, but of his power of gauging the mind of this particular examiner. Viriamu Jones's success in this instance gave him that feeling of discomfort which a generous mind must feel in taking any prize from those who have, on moral grounds at least, deserved it more (one competitor had been working for three years) and are known to need it much.

<sup>2</sup> Professor Leland affirms that by daily learning and continuous revision, the memory may be made so strong that a whole sermon once heard may be repeated. Thus many Easterns, having learned the Mahabharata or the works of Confucius by heart, devour their European textbooks to a comma.

In Wales, many a collier has his Bible word for word, the unwritten poetry of the bards yet lives, and memories are good. In Viriamu's home, where things heard in the day were repeated and discussed at night, the father's rich memory, diligently trained, fed the imagination of the children, and each would store up somewhat in his turn, upon which all might speculate and comment.

science scholar who always spoke of him with admiration and affection. He sometimes quoted from a sermon of the Master's, amused at the audacity which curtailed the text to 'Man shall not live by bread alone, but by every word'; stopping short there, Jowett began an admirable discourse on the goodwill and kindness that can be expressed in a few words about the weather or the state of the crops.

Nothing honours Jowett more than the magnanimity which led him, while only a Fellow, to persuade the College to offer exhibitions for physical science and mathematics in place of some of those formerly given for classics only. Jowett asked Viriamu Jones to stay at the Master's Lodge after he had won his scholarship and before coming into residence, and no one could have been better prepared by his home life than the young science student to appreciate the ways of 'old Jowler,'<sup>1</sup> as Leslie Stephen portrays him :

Throwing out suggestions, not imposing opinions ; going about like a Socrates cross-examining and dislodging old prejudices with a happy impartiality, not dogmatising or enlisting recruits for any definite party. The College was to be a gymnasium to strengthen mental fibre—not a place of drilling according to regulation—where you might not learn anything very definite, but you were subject to a vigorous course of prodding and rousing, which is perhaps the best of training for early years. . . .

You might be propelled in any direction, but at least you would not stand still.

Professor Poulton gives a list of Viriamu Jones' Oxford friends,<sup>2</sup> and notes that no fewer than three of these—W. P. Ker, C. E. Vaughan, and R. H. Pinkerton—became members of the College staff at Cardiff, while P. A. Barnett of Trinity held a Professorship at Sheffield under his rule. Other friends were A. H. Bullen, C. H. Firth, H. R. Reichel, J. M. Rigg, and J. T. Wills; the latter, one of the boldest spirits among them, recalls the fact that about 1875 to 1880 Balliol College was at the height of its

<sup>1</sup> 'A man who is nicknameable must be a good fellow, and the phrase "old Jowler," with its vague suggestion of a surly, but trusty watch-dog, fits a man who could attach in spite of external crustiness.'—Leslie Stephen.

<sup>2</sup> *Viriamu Jones and other Oxford Memories*, pp. 47–8. E. B. Poulton, F.R.S.

renown. Dr. Jowett had been Master of Balliol since 1870. Professors T. H. Green, Henry Smith (Savilian Professor of Geometry), and Richard Nettleship were among its tutors. Viriamu found himself in good company and made many friends. One of these writes of him: 'He was welcome in most of the little parties of four or five that met and talked,' among whom were such men as Walter Lawrence, who made the settlement of Kashmir and was private secretary to Lord Curzon, Lord Curzon himself, Sir Edward Grey, Lord Milner, Arnold Toynbee, the Hon. St. John Brodrick, Clinton Dawkins, who became H.M. Financial Adviser in Egypt and Minister of Finance in India, and other well-known men. With Professor Poulton he had interests and experiences in common, both in term time and vacation; among them was being proctorised for the first and last time, an event that led to the composition of sundry parodies.

Viriamu Jones never spoke at the Union, although he took a deep interest in its affairs, and for two terms of 1878 acted as Sub-Librarian.

He had taken a First in Mathematical Moderations in the fifth term of his residence (Michaelmas, 1877), and another First in his Mathematical Finals in June 1879. The third and fourth years were spent in lodgings, first at Beaumont Cottage, Beaumont Buildings, St. John Street, then, after he had taken his B.A., at 10a St. Giles, one of two charming grey-stone houses which all who knew Oxford before 1909 will well remember, and which have now been inevitably and not unworthily replaced by the new buildings of St. John's. At the end of his fourth year, in June 1880, Viriamu Jones took a First in the Final School of Physics. He was, however, to stay at Oxford a fifth year, partly as a successful tutor to private pupils at his new rooms,<sup>1</sup> 50 St. John Street, partly as Demonstrator in Physics at the Clarendon Laboratory under Professor Clifton.

Viriamu did not, however, think very much of these examination successes. As early as 1877 he had written

<sup>1</sup> In 1878 he wrote: 'All my pupils too, to the number of five, have passed their exam.'

to his sister of an old University College friend : ' He is now M.A., B.Sc. of London, and will probably soon take his D.Sc. All these exams. are a mistake, of that I am convinced.'

Young as he was, he was consulted at this time by a friend of his father's, who had brought her sons from Melbourne to England for their education. She wrote in 1877 :

I have had great pleasure in making your acquaintance, and thank you for the many really useful hints you have given me about the training of *boys*. At some future time I hope to see a great deal more of you if ever you come to Melbourne. . . .

When she was about to return to Melbourne, she wrote :

I will certainly write to you about your Father, and ' other things also ' ; and if at any time my loving sympathy can help you, it is yours for the asking—I don't think we shall differ about many points—if we do I shall like to see the view you take.

And from Melbourne, on March 15, 1878 :

No one who was only in the habit of hearing your Father preach would imagine he had such a fund of knowledge on almost every subject, and with it all, the total absence of self-conceit endears him to everyone who knows him. Whenever he is to preach the church is crowded (and I am pleased to see so many young men amongst the congregation), and the many that are continually joining the church testify to the good he is doing amongst us.

His intense love for humanity is beautiful, and I like his broad and hopeful views on the subject of everlasting punishment. The question has always been a difficult one, and it is a mystery to me how anyone, being a Christian, can take any pleasure in thinking it true. If Dr. Farrar is right there is little or no foundation for the doctrine even in the testament. I like to think with your Father and Tennyson that ' somehow good will be the final goal of ill.' My little ones are pleased in noticing how often your Father draws his illustrations from the love of a Mother for a child or vice versa, and there is always something in his sermons that interests them.

When first he came here I was very much afraid we would not keep him the three years ; now I think we will ; he seems very pleased and satisfied with his church and congregation, and he tells us, not in flattery I believe, that he never had more attentive



congregations even in London. Mrs. Jones is very much liked by everyone, and I think she is on the whole pleased with Melbourne, although her heart will at times turn lovingly towards the old country. . . .

P.S. We were at your Father's again last night; they seem to think this a good place for a rising young barrister. How would you like to come and try? Your Father says he wishes you would be a minister—did you never think of it?

But, after his father's return from Australia two years later, Viriamu Jones' future was still a matter of uncertainty; he was working very hard, and in March wrote to his sister:

I send a great many letters to Kate<sup>1</sup> and seem to have no time for others—I am really busy. The lectures are well attended and the men do not fall away. I have besides three honour pupils—and am all day at the Laboratory. . . .

The story you tell me of Pen is *awful*—what a child it is! You will have to send him to me some day to be broken in, when I am schoolmaster and experienced in boys—I am thinking seriously of that branch of teaching as being on the whole more adapted pecuniarily to the needs of a married man than a needy professorship. We shall see in a few months.

A letter asking him to fulfil his promise of playing chess by correspondence shows that his recreations at Oxford were apt to be serious; but this did not prevent his lively spirits from finding congenial companions of a far from studious type, such as his friend E. H. Irving,<sup>2</sup> who chides him for unfaithfulness:

Hath the memory of the 'merry days when we were young'—young in years as in experience—passed from thy mind? Can it be that the recollections of those pleasant hours spent in sweet communion, when together we propelled the fragile whiff to Kennington or Sandford, and together quaffed the fragrant cider cup, while in friendly rivalry we would poise the skilful quoit, or of those hours again when with rapid stroke we drove the light canoe skimming o'er the peaceful waters of the Cherwell, and with adventurous paddle dared the raging-mill stream—can it be that these recollections have faded from thy memory? Or is it that, 'to dumb forgetfulness a prey,' thou rememberest not how

<sup>1</sup> Miss Kate Wills, afterwards his wife.

<sup>2</sup> Edward Henry Irving, an undergraduate friend of Viriamu's at Balliol; grandson of Edward Irving, the founder of the Catholic Apostolic Church.

'many a time and oft' we in companionship of ignorance aided each the other's first endeavours to master the art of riding with ease and gracefulness the swift velocipede, falling from and mounting again the wobbling boneshaker? Have the dulcet sounds that with Chancellor and the remainder of the harmonious choir we poured forth in melodious symphony and in chorus sweet, have they failed to awaken a responsive echo in thy breast? Think, I implore thee, upon all the past scenes of gladness that I have thus briefly endeavoured to recall to your recollection, think of Balliol's time-honoured walls re-echoing with songs of mirth proceeding from my rooms, lofty and far removed from ken of Master or of Dons; then let thy heart be opened, let it yearn towards thy friend: let all the sweet emotions of which thy gentle nature is susceptible—alas! I fear me, too susceptible. . . .

We will pass on to the real Simon Pure—the 'pure serene,' so to speak, of which Keats talks, and converse a little as to what I have been doing lately. I am as you see at Southampton. This is an undoubted fact. What then? A question naturally arises. 'How did you get there?' I smile pityingly upon my interrogator, and answer proudly, 'Bicycle.' Yes, stare not, look not thus askance, cast not those glances of derision at me, lay not thy digit upon thy nasal appendage and murmur 'Walker' in accent of mockery. Thou knowest not what thou dost. On Thursday the 21st, I appeared upon Waterloo Station leading a bicycle and ensconced myself in the guard's van of the 9.30 A.M. train to Surbiton. Here I left the train and the journey now began. 'Twas ten of September morn by the chime—As I started on my path' (Campbell—slightly altered). Guildford was reached at 12.20, eighteen miles on only, fearfully slow going, only to be accounted for by the fact that I had had no practice for some time; beer ensued, Farnham about 1.30, Alton about 2.30. Here lunch and left again 3.30. Alresford 4.45, Winchester 5.45, Southampton 6.55, seventy miles exactly. I was rather done up, but change and grub put me all right. Roads were in prime condition, and country was very pretty. I have been out one or two rides here, ran twenty-one miles yesterday, between 3 and 5.45, in which time I went in and saw two churches, Romsey and Hursley, got a spill on to a lot of new road metal, cutting my finger badly, and spilt an old woman as I came out of Romsey.

E. H. Irving, now Editor of the *Kalgoorlie Mirror* (West Australia), wrote in May 1914:

The very first time I met him [Viriamu Jones] I was greatly impressed by two things about him, the singularly winning charm of his manner, and the suggestion he conveyed, all the stronger because I believe wholly unconscious on his part, of great mental



power and strength of character. I liked him at once, and as my knowledge of him grew I learned to love and admire him above all others of my Oxford friends. There were two men who always struck me as living their Oxford life in one way better than myself or any other men I knew in College—they were Vir and Harry Reichel. Both succeeded in getting the most out of Oxford by the way in which they combined its work and its pleasure, doing both well, and dividing their time and their energies in just the right proportions between the two. Most of us, I am afraid, overdid one or the other—generally the latter.

Another letter to Viriamu, written in 1876, forms a link with the world in which he had grown up :

MY DEAR VIR,—I thought of writing to you when they asked me to vote for Horton, as I saw your name and address, but somehow the thought died away.

Doubtless you have been hearing about me all along off and on, how I went to Bradford and took a stand for the Lord, notwithstanding all our excuses as boys, but went thro' no deep ploughing of *conscience before God*, till I went to Penzance in broken health.

Since then I have been seeking as far as I have been able (I still have to walk with two sticks, Gal. vi. 7 and 8) to point sinners to the Saviour and help His Saints to better understand their calling and responsibility.

Now let me ask, as an old familiar chum, in plain words are you *saved* or are you *lost*, are you in Christ, accepted in the Beloved ; or in Adam, under *condemnation* with the *wrath of God* abiding on you ; *lost* as a child of Adam, and *guilty* by wicked works ?

I was thinking the other day how nice it would have been had I continued my studies instead of going to business ; but I was pulled up by, that same day, coming across 1 Cor. i. 18-29, and this, in connection with it, ' What is all the wisdom of this world ? ' Simply that in which the *flesh clothes itself*.

Now, dear Vir, will you kindly *consider* 1 Cor. i. 18-29, and let me know the result.

My sister May has come to live with me and wishes to be kindly remembered to you.

Believe me, dear Vir,

Yours very affectionately,

J. S. HANDS.

His friend, Mr. P. A. Barnett,<sup>1</sup> remembers meeting Viriamu Jones for the first time at Oxford.

<sup>1</sup> P. A. Barnett, Inspector of Secondary Schools ; author of *Teaching and Organisation*, 1897, and of *Commonsense in Education*, 1899.

It happened that he was the first live undergraduate whose acquaintance I made, outside my own School circle, before I went to Oxford. When I was 'up,' in the summer of 1877, for a Scholarship at Trinity, an old schoolfellow took me round one evening after hall—we dined early in those days, at the reasonable hour of 6—to the rooms of the present Regius Professor of History. 'J.V.' was there with some others; I remember 'J.V.,' but, except our host, almost all the others are now not even shadows of names to me. I can fix the time pretty certainly; for Mr. Bradlaugh had been announced to enliven the Cornmarket with an address to which a good many of us went later in the evening. The proceedings at which we assisted were interesting for (amongst other things) a long altercation between Bradlaugh and a well-known Balliol man, now a Redemptorist Father.

'J.V.' fascinated me then as he did many a time thereafter. He could be witty and grave almost in the same breath. I do not know, I never knew, anyone who could laugh so heartily; and no one like him for subtlety of intelligence ever came my way. On that particular occasion Bradlaugh, of course, was the main theme of talk. Opinions on Bradlaugh were in those days inclined to run to extremes; it was in his theology that most of us were interested, not his really important economic, political, and sociological views. 'J.V.' I remember, would neither ban nor bless, but was certainly inclined to think that theology, as presented by Bradlaugh, was nought, whereas Bradlaugh's criticisms on the incidence of taxation were of real importance.

He was two years my senior and in another college, so I saw little of him immediately after I came up. But I happened to have a good many Balliol friends, and when a small colony settled in Beaumont Cottage, Beaumont Street, I often saw him there.

'J.V.' in those days seemed able to combine work and social pernoctation in an altogether remarkable way. He was always fresh and cheerful even when his companions drooped.

And his interest in things other than his work is evident from his letters to his sister from Oxford, in April 1877:

Have I told you that Ruskin is lecturing here three times a week? He reads most beautifully—his voice is wonderfully musical, full of tenderness, capable at times of the minor cadence of the Welsh—or something very like it. On Saturday he read to us the story of St. Ursula—the good princess full of all wisdom and the fear of the Lord, who with eleven thousand virgins went on a long pilgrimage; and they were all slain on their way to visit the Holy Sepulchre by the Soldan of Babylon and a host he had gathered together.

I have got some exquisite songs—Mendelssohn's Duets, 60 Schumann's songs, 70 Mendelssohn's songs, 12 Schubert's songs. But of course I don't know many of them.

1877.

MY DEAR SISTER,—I have received Mon's very amusing letter. He knows what and how to write.

Ruskin has finished his lectures. A few lectures back he preached us a sermon on 'putting away childish things':—(1) Lack of sympathy, (2) all competition, (3) the scientific mind. (I hope I have not told you this before.)

Henry F. Morley has been staying with me from Saturday to Monday. I have this term made myself sure (alas! too sure) against over-work. My place in the Examination is uncertain but is probably all right.

Appeals came to him as the family critic. His sister wrote :

Mr. Hartland has published a dramatic poem. Shall I order you a copy? He is dying for your opinion of it.

And again :

If I send you my paper on the 'Epic of Hades,' will you revise it and cut it down for the press? Is it too much to ask? It must be done at once as they (the Swansea Literary Society) are anxious for it.

Also his brother Irvonwy :

I am still poetising furiously and am full of ideas and poems. What wouldn't I give to have time to work them out! I shall be glad to have the Ode and ballad back when you have done with them. I should like to re-write the Ode and send it you again if possible in a form of more perfect unity. I will send you a few more poems to read if you like, but am afraid to bore you now you are getting so near your exam.

And later :

I hear you are going in for your exam on Wednesday. Mind to keep up the credit of the family examically. Have been working too hard poetically, but have done fairly good work and am approaching the conclusion of a long poem of 3 Cantos.

From Brynmôr letters came regularly. The two brothers had lived together for part of the time Viriamu was at

University College, and Brynmôr, only four years older, was an ideal elder brother and wise friend; he understood Viriamu's temperament and often gave him good counsel.

Of the two brothers their sister wrote <sup>1</sup>:

I loved to see Brynmôr and Vir together: it always meant hearing them, too, as they thrust and parried with bewildering swiftness. And when a rare pause came, they would smile into each other's eyes the message 'We *are* having a good time to-day!' before beginning the next impetuous round. Their sympathy and understanding completed my pleasure. Each was delighted when his antagonist scored a point, though if a crushing answer could be returned, he was not spared. No quarter was asked or given. Between the brothers there was a—

'Beautiful friendship tried by sun and wind,  
Durable from the daily dust of life.'

During his father's absence in Australia, Viriamu spent many holidays with his father's cousin, the Rev. Morlais Jones, at Lewisham. 'Mrs. Morlais Jones grew to be as fond of him as of her own brothers,' and her husband watched his career with pride and deepest interest. Their daughter, Mrs. Raymond Beazley, says:

I remember him as a figure somewhat in the background in my early life to which father pointed when spurring us on to work. He used to say 'Your Cousin Vir worked far into the night, with a wet towel round his head.' On his occasional visits to Lewisham, even as children Gwen and I felt his great charm and looked forward in trembling excitement to seeing him, though we feared his asking us how much Latin we knew. He did ask us, and our answers invariably cast Father into great gloom. I think he had a wonderful gift of making us love the best books. Father I think adored him. He was something between an only son and a brother to him, and his voice always took tones of deep affection when speaking of him.

To the strain of examinations was now added great anxiety as to his father. In December of this year (1878) Thomas Jones wrote to say 'that he felt he would be very grateful if he could preach for the two years'—to wit, five months longer; but feeling much restored, he put off

<sup>1</sup> *Viriamu Jones and other Oxford Memories*, p. 31. E. B. Poulton, F.R.S.

his return to England so as to complete his term of three years. Only three months after this decision, Mrs. Thomas Jones wrote that her husband was weary and his lungs once more affected. 'He says he has preached for nearly forty years in a fever of excitement.'

It now became evident that Thomas Jones' health was rapidly failing, and the return of the whole family was determined by the close of 1879.

By a curious coincidence, while Viriamu Jones was triumphing at Oxford, his matriculation success was repeated at Melbourne by his brother Leifchild. 'He was first of over 500 boys,' said his delighted stepmother, 'and only one has ever done so well here before.'

The summer of 1879 was memorable in Viriamu's life for his first visit to the Eagle's Nest, the Swiss chalet belonging to Mr. Alfred Wills,<sup>1</sup> father of the Oxford friend. This chalet had been built by Mr. Wills on a spur of the Buet in Haute Savoie. He was one of the earliest members of the Alpine Club, and the first man to scale the Wetterhorn; his eldest son, J. T. Wills, gave Viriamu his first lessons in climbing among the difficult gullies, arêtes, and grass slopes above the Sixt Valley.

The valley lies nearly due north from Chamounix across the ranges of the Brevent and the Chaîne des Fys. At its head, to the east, loom the grim buttresses of the Buet; to the north, the grey limestone of the Grenier rises above steep and fragrant pastures; to the south, exquisite in its varied hues of pale brown and warm gold, is the stately ridge of the Pointe de Salles, the easternmost extremity of the Chaîne des Fys; the base of that great precipice sinks abruptly in pine woods, under whose deep, fragrant shade stretch carpets of thick moss and fern, while higher up their sombre masses are broken by the gleam of beeches when the sun is high.

On every side is the sound of many waters: torrents falling from great heights and breaking into foam as they

<sup>1</sup> Afterwards the Rt. Hon. Sir Alfred Wills, Puisne Judge of the High Court, author of *The Eagle's Nest*, and *Wanderings in the High Alps*.



drop sheer on rocks or fill some peaceful pool; streams from the mountain-tops, where clouds gather and hang and break, flowing fast and faster as they flood their stony beds; little brooks fed by dews of the pastures—all rush downwards to swell the Haut Giffre, hurrying to the valley far below.

And for the flowers: in July the grass slopes about the chalet are rich in Alpine rhododendrons, roses, and the small red Alpine tiger-lilies, anemones whiter than those in any English garden, yellow arnicas, astrantias, campanulas, orchids, gentians, blue flax, and columbines; while a few hundred feet above, and near the edge of a little glacier descending southwards from the summit of the Buet, are seen flowers of early spring.

Ascending a green slope to the western spur of the Buet, then mounting a track that skirts rocky boulders and tracts of shale—Ruskin's 'beach of scales of dead fish, immeasurable barrenness'—after two hours the climber finds himself on a long bank of green turf, starred with blue gentians, and is soon within reach of the ridge of the Col de l'Échaud; one step more, and, a new world lies revealed—the silent majesty of Mont Blanc and its grouped peaks, pinnacles, and needles, dazzling white, sublime in purity and isolation. From the Col de l'Échaud, Viriamu first saw the mountains that he came to love so well.

In the long vacation of 1879, Mr. Alfred Wills, arriving with some guests at Geneva on his way to join his family at the Eagle's Nest, was met by his son Will and Viriamu Jones. The travellers, tired with the great heat, noise and dust of the train, welcomed the vision of the young men, gay and vigorous, in the rough walking clothes that were worn or borrowed in the happy valley. As Viriamu Jones was introduced to Mr. Wills and his companions, two of them at least were aware of a most vivid and radiant personality as he smiled his greetings. One of them writes:

I remember Mr. Jones's picturesque appearance very well: he was then twenty-three years old and his dark blue boating coat and slouch hat were very becoming, his face tanned with

sun and wind ; he had a most attractive manner and address, with the engaging quality of taking interest in and listening to other people instead of caring only to talk himself, which he would have been amply justified in doing. I used to like to watch him talking, his beautiful eyes glowing with interest and enthusiasm, or sparkling with amusement. I did not know then what work he was going to take up, nor guess what a great teacher he would be, but I was often struck with his wonderful power of making straight what seemed crooked, throwing a great flood of light into gloom. He seemed to take pleasure in explaining to the ignorant : nothing was too small and too simple for him to shew its meaning and its uses—he had the gift De Quincey speaks of ‘ brightening the intelligibility of the obscure.’

The daily occupation, in good weather, was a walk, climb, picnic, or a more serious expedition. When no expedition was made, there were athletic sports and games of physical skill in the Succursale outside the chalet. In these Viriamu Jones was most successful ; and for his brilliant feats in the standing long jump (though he was shorter than any of the men), he was called the ‘ Little Hercules.’ At other times he might be found the centre of a group, reading Rossetti’s ‘ Staff and Scrip ’ or William Morris’s poems aloud and infecting the most prosaic members of the party with some measure of his own appreciation of the great story of Sigurd, Gunnar, and Brünnhild.

In the evenings, when the party was too large for the window-seats and benches and the air was keen, the young men would light wood fires on the garden paths, around which the party sat under the clear starlight. In the glare of the flames somebody would tell ghost stories or sing songs, or all would join in catches. Invariably ‘ Mr. Jones ’ was called upon to sing ‘ Once there were three Jews ’ and ‘ Evøe, evøe wonderful ways,’ the others taking up the chorus ; sometimes the French servants sang their pleasant patois songs, the sound of their voices coming across the garden to the party round the bonfire.

This visit made him acquainted with his future wife, and was the beginning of a long friendship with Sir Alfred Wills, to whom Viriamu on two occasions acted as Marshal

on the Midland Circuit.<sup>1</sup> Of Mrs. Wills he wrote: 'I think no one treated me so kindly as Mrs. Wills did last summer since my mother died when I was eleven'; and a few months afterwards he wrote of Sir Alfred Wills: 'I know none to whom I should apply Hamlet's praise of Horatio more than to him—"fortune's buffets and rewards hast ta'en with equal thanks."'

In September he went with Mr. Wills and his son to Chamounix. His first performance in walking on ice and snow satisfied even his guides.

On October 12, 1879, he wrote to his future wife from Oxford:

It is good of you to have sent me so long a letter and one so full of news.

I have no such list of adventures to tell you of. I have been trying to work, but my thoughts have often wandered back to the Eagle's Nest; the little walks, the garden fires, and all that charming time.

And now let me be very serious. That we have begun to love one another is a very delightful fact, but a little tragical to poor people. I tried last night to look into my future, and as regards wealth of this world it looked to me very empty. It has perhaps this advantage, that you will see more of me before you promise yourself to me.

I am going to hear the Master preach this afternoon.

*October 31st.*—Midnight! but I cannot allow another day to pass without writing to you.

What a lot of confessions! How dreadful must have been your conduct at Braemar—but I send you absolution, my fair penitent, since you may otherwise perhaps some time refuse it to me when I make you my father confessor—but, my daughter, sin no more. After the above curious mixture of relationships, let me fall into the more pleasant one of Viriamu and call you

<sup>1</sup> Sir Alfred Wills wrote in 1894: 'I am extremely sorry to part with Vir. You know better than anyone what an interesting companion he is—and how much one learns from him daily and hourly. You know also his unfailing good temper, courtesy, and affectionate attention, and you will not require much assurance that I feel very grateful to him for all its kindness to me.

'I am very sorry indeed to part with him, but I feel also that he will be more in his proper place at Oxford figuring as one of the foremost of the men of science and of great ability assembled there—instead of playing second fiddle to a poor lawyer like myself.

'We have had, I think, a very happy time together. It would not be easy to exaggerate the sense of affectionate regard which I entertain for him.'

Kate—Kate is a name I fell in love with when I was nine—the object of my affections was a young married lady of nineteen. We are still very great friends, but I never called her Kate—her husband did, and I used to wonder when I should have a Kate of my own, and think how nice it would be.

I am sorry for your friend—it is very sad—but I am sure you will comfort her as much as possible. It is grievous that in this world, because one loves once it does not follow that one loves always—and very often it is nobody's fault—only a melancholy fact. I am trying not to get thin according to orders—to-night I am up later than usual.

I have been working in the laboratory all day—sleepiness is the result, and perhaps incoherence; if so, pardon.

*November 1st.*—This interval of a line denotes eight hours' sleep. Parti-coloured 'pyjama' life not unmixed with dreams; to prepare me for it dissipation visited me, clad in grey medical gravity, in the shape of a tumbler of gruel with whisky in it. I am exposed to this temptation because of a slight cold.

I have been thinking much about that question which is commonly addressed to lads of fourteen. 'What are you going to be?' As yet I am not sure, but in March or April I shall pretty definitely decide, for then my father will return from Melbourne.

*November 11th.*—Look! the whole week has slipped by since I have received your letter and I have not written to you. I cannot tell you how I sympathise. Let me make an old remark which I thoroughly believe—Affliction is the refiner's fire. Common-place comfort you will say—true, but there is no other—this seems to me the essence of religion, for if we believe this, Nature becomes God and Father. But I must not preach you a sermon—it would be far better if you were to preach me one.

Why don't I offer to come over and read to you every evening? I wish I could annihilate distance and travel like the fabled possessor of that wonderful mat. But you see I can't, and so I can't read to you every evening—now. I read 'Andrea del Sarto' the other night—I had never read it before. It is very sad. I am very glad you like the lines to his wife. I think it a most exquisite poem, and re-read it after receiving your letter. I read it aloud to myself. The rhythm is very perfect and full of music.

*November 28th.*—I hope you have not been saying unkind things to yourself about me for not writing sooner. I have been in for a little examination but it is now finished, and having walked about a long time the day before yesterday I have eliminated all traces of it. I was very glad to get your last letter written in such good spirits. I remember I came down that morning as I often do saying to myself 'I wonder shall I see Kate's handwriting on the table?' I am always



disappointed when I don't, but I tell myself I have no right to be since my own writing is in quantity so meagre.

I am glad you are not going to Buenos Ayres. It is a very long way as things go on this globe, and if you went, I might be tempted to run away to sea and work my passage out to see you, or conceal myself in a cask in the ship you went in like the heroes in the boys' books I used to read. Just imagine your consternation when I emerged from the cask, cadaverous and lean from long fasting, for I should have been two or three days without food or drink, subsisting solely by an effort of will on  $\frac{1}{4}$  lb. of tobacco. Besides, my legs would probably be permanently bent owing to the cramped position, the cask being an unbearable bed after lying in the sun in the natural arm-chairs on the top of the Pointe de Salles.

I will write you an autobiography, but I would much sooner tell it, so it shall be kept until we meet. And as I must now go to a lecture I will despatch this note, which I wish were worthy of being called a letter.

*February 10th, 1880.*—My father is to arrive home in May. He will start if he is well enough at the beginning of March. I wrote a letter to him at Xmas full of my true history.

I am working tolerably, my examination in May is coming near. I have two pupils; one learns Mathematics and the other Physics.

Meanwhile, the question of a career was still unsettled, and Viriamu wrote on February 17 :

I have lately felt very much what Professor Roscoe told your brother : it is that which has made me think of doing something else than teach. I have too given up almost all idea of the Bar. I shall not really know for about six months or perhaps four whether I had better give up all idea of staying on here. I am told that if I stay my chances of a Fellowship are very good, but I question very much whether a Fellowship is worth staying for (I mean if staying up to teach is the condition of holding it). It was this feeling that made me speak to my friends in Swansea about manufacturing [the manufacture of some metal], and what they told me was of so encouraging a nature that I have been seriously thinking of it since, especially as Professor Clifton seems to think that in that way I am likely to have more time to give to any original work that may come into my head than if I spend my time in teaching.

I shall be very glad when my father comes to have him to talk to about it. You ask me about him. Let me tell you—he is an Independent minister, and the truest orator I have ever heard speak. I think this is not merely filial prejudice—you will see very soon.



The first post for which he applied was that of Secretary to the City and Guilds Institute; his brother Brynmôr did not approve of this work for Viriamu, and wrote on November 28, 1879:

I don't much like your Technical Directing Scheme. It is not the kind of thing for you, but applying for it can do no great harm. Don't think in saying this that I wish to throw cold water on any plan of yours.

And on February 27, 1880:

I am very glad your friends have given you such splendid testimonials [for the post already mentioned] and it is worth trying for the post to get *them*. But I much doubt whether your true course lies in taking a situation of this kind: seeing how well Jowett and Smith write of you, don't you think you are pretty sure of a Fellowship?

I cannot help feeling it would be a pity for you not to become a Fellow of one of the Oxford Colleges. With regard to marriage, it would be better to have £400 at Oxford than £500 in London as Secretary of the London Institute. I suppose Fellows who are tutors or scientific teachers can marry without losing their places? Besides, you would not be able to go in for your Second School, I fear. Clifton's observation about your capacity for experimental work is very encouraging and seems to me significant of your best course and career in life.

His sister, Mrs. Maine, delighted with his testimonials, wrote: 'Whether you get the appointment or not, these letters will be something to have won from such eminent men.'<sup>1</sup> The testimonials were, however, his only satisfaction, as Sir Philip Magnus was appointed.

Viriamu himself referred to this application:

Do you know what I have been doing? Something horrible! The reason that I say it is so horrible is that you have to write a letter all about yourself, asserting your qualifications for the post.

I have heard nothing from the place with the long name. One of my friends tells me that I am too young to be 'Organiser.' Perhaps I am. As to the number of candidates, etc., I don't

<sup>1</sup> Dr. Jowett, Master of Balliol College; Professor Henry J. S. Smith, Savilian Professor of Geometry in the University of Oxford; and Professor R. B. Clifton, M.A., Professor of Experimental Philosophy in the University of Oxford.

know any more than you. 'Probably,' says Professor Smith, '1,000.'

If I could only get the appointment—that is too good to think of—so I won't finish the sentence.

*March 23rd.*—I went down to my cousin's at Lewisham on Sunday and stopped there till Monday morning. We got up early and caught a train which brought us up to Hammersmith about 9 o'clock. We saw the boat race—but as they passed us Cambridge was a quarter of a length ahead; and the cheering for that University was deafening round me. I assured people around that Oxford was going to win, but they would not believe until the Umpire's boat passed down. Last night I came down here by the 5.15 train from Paddington. I smoked and dreamed on the way. In all pictures of the future you sit on the queen's throne; did I not tell you so before we came to St. Jeoire? I remember telling you I am your slave, but you would not then unreservedly accept your humble servant. Kate—you positively laughed! But you do not know how you riveted fetters on me when you rode that mule at the end of the day—and then walked and gave me a strawberry.

I have begun to work already, so that if possible I may have time to come to London at the end of the vacation.

*April 6th.*—It is election day here to-day—and there is expectation of a riot if, as is likely, the Liberal candidate gets in; for funnily enough the Irish are for the Tory candidate. I am going into the town presently to see whatever is going forward. I hardly know whether you are an ardent politician. We mainly talked of other things.

*April 22nd.*—I have been going to write a long time, but I am a mere slave for about a month. You don't know much about examinations, so I will tell you something—they are (but it is a secret) inventions of the Wicked One. Making frocks, Kate—which I don't doubt is bad enough—is nothing to them.

You are very good to send me two letters without having an answer—it always makes me happy to see the handwriting I know. You are quite right. Write you must 'for the good of my health'; if you don't I shall get a Second Class and feel defiant. But before I go in I am coming up to you to be made happy, so that I may go in with a light heart.

Do I ever think you can be of use to me? Dear Kate, you ask that? I look to you then, let me tell you, to humanize me and keep me good, to prevent my becoming a one-sided vessel of facts. You are to be my Art and my Poetry. Do you understand?

I hope to be in London in about a fortnight; meanwhile exercise forbearance with me, for just at {present {I

am not interesting, but perhaps I shall be when you come to help me.

I am staying within hearing of shouts—there is a Debate on the late Election in the adjoining hall. I looked in, but there was a heavy man speaking, so I came away.

*May 2nd.*—You are very good to write me two letters. I have been going to write for days. I actually began a letter which I could not finish because I had to go to the laboratory.

My father is to arrive I think on Wednesday, so I shall try to come and see you on Thursday; but you shall hear again before that.

My examination is on the 17th, and I have a great deal to do before it—so that I shall not be able to stay more than a day in London. I have not been reading anything nice—formulæ and their application is my literature. In the laboratory I have been measuring rings and crystals. Do you know that two lights added together make a dark? This is because light is a motion, and two motions in opposite directions if they are equal are the same thing as rest. I will show you these crystal rings some day. They are very beautiful. The weather here is, as it is with you, glorious. I always revel in sunshine. I sat in it all this morning and was thankful.

*May 23rd.*—I have been hoping all the week that you were enjoying yourself in Holland—I was very happy this morning when I saw your handwriting. You wished I was with you—if you only knew how I wished it! But you ought not to be hurried—although in a week's holiday it is hard to help it.

Remember that the more letters I get this week the better I shall do in my examination.

*June 2nd.*—You have been very good to me during the examination, and I thank you more than I can say.

I finish the practical part on Saturday evening. On Thursday, Friday, and Saturday, I had ten hours' work each day—from 10 to 8 o'clock. I was not sorry when it was over.

On Sunday I determined to have some fresh air, so Irving and I went down the river, starting very early so that nobody's feelings might be hurt. We sculled for eighteen miles and then we had lunch at Shillingford. After we found ourselves so comfortable that we determined not to go any further. I laid myself down in the sun—and it reminded me of the Chalet; but that was wanting that I wanted much, I was only comforted by thinking that I should see you next week.

*June 6th.*—I am going to give you good news now. I have done, as I said, well enough in the examination, and the list is most satisfactory. I have felt that I have been working for you as well as for myself. If I had failed it would have been a

great blow in the face—and that made me anxious, but you see what your letters have done.

And now please be very happy ; there are always bright days in store for people who love one another. I don't think it will be very long before my prospects are definite enough to please anybody.

On June 6, 1880, Brynmôr wrote :

Great congratulations most potent examinee ! You have worthily crowned a great University career, and I hope your future life will be as successful as your past. You have had a long career of it and deserve your success, and nobody in the world rejoices more at it than I do.

Towards the close of his Oxford career, in 1879 and 1880, Viriamu Jones thought much of his future life, and on consulting Jowett received the emphatic advice : ' Be a physician ' ; and no one who knew him can doubt that the work of a doctor, both on its spiritual and professional sides, would have appealed to him.

He wrote to his father on the subject, but after his long University training he wished to be at work.

It was in May 1880 that Thomas Jones returned from Melbourne, and, having refused an invitation to Oxford, took up his former ministry at Walter Road Chapel until his death in July 1882. In August 1880, just after Viriamu Jones had taken his second First, it was decided that his younger brother Leif should go to Oxford, provided he could get a scholarship. Viriamu sent him advice, and set him papers by which he discovered his weak points. Leifchild entered Trinity with a scholarship in 1881.

In the autumn of 1877, Viriamu Jones wrote to his sister notes on Ruskin's lectures on ' Landscape Painting : twelve Readings in " Modern Painters," ' the last of which, quoted by Professor Poulton, throws light on one of the three missing lectures, numbers IX–XI. The sentence is this : ' Ruskin has finished his lectures. A few lectures back he preached us a sermon on " putting away childish things " : (1) lack of sympathy ; (2) all competition ; (3) the scientific mind.'



At Oxford all studies, except perhaps classics, attracted him ; in fact, earlier in the year his versatility had aroused some anxiety among his friends. His friend, C. M. Thompson, now at Cambridge, rallies him upon it :

What particular science is your genius now flooring ? I hope you haven't changed from your original intentions, for if you go in for many more things you won't do much real good with any of them. You know that is the danger you are likely to run into.

The fears thus expressed proved to be groundless, and the multiplication of interests year by year was not the least of Oxford's gifts to Viriamu Jones.<sup>1</sup> Professor Poulton has recorded his enthusiasm for the Union, his interest in Shakespeare, and his devotion to Browning, though this, in its origin at least, dated back much farther than Oxford, since the poet had for years heard Thomas Jones preach at Bedford Chapel, and their admiration and sympathy were mutual. Other interests are unfolded in the following letters, the first of which was written on a vacation visit to the Isle of Wight and when he was preparing a pupil for examination.

*August 5th.*—The day is very lovely, and I am looking down on the sea. I am about 150 feet above it and the beach is

<sup>1</sup> The following distinctions and honours were won by Viriamu Jones at London and at Oxford :

- 1872. University of London.—Matriculation Examination, *First in Honours, with Exhibition.*
- 1873. University College, London.—Chemistry, *First with Gold Medal.* Zoology, *First with Silver Medal.* Physics, *Second with Second Prize. Andrewes' Prize (£25) for students of one year's standing.*
- 1873. University of London.—First B.Sc. Examination, *First Class Honours in Chemistry.*
- 1874. University College, London.—*First Prizes in the Classes of Applied Mathematics, Physics, Geology, Mineralogy, Philosophy of Mind, and Logic. Andrewes' Prize (First £50) for students of two years' standing.*
- 1874. Balliol College, Oxford.—Election to *Brackenbury Scholarship in Natural Science.*
- 1875. University of London.—Second B.Sc. Examination, *University Scholar in Geology.*
- 1877. University of Oxford.—Moderations, *First Class in Mathematical Honours.* Elected Fellow of University College, London.
- 1879. University of Oxford.—*First Class in the Mathematical Final School.*
- 1880. University of Oxford.—*First Class in the Natural Science (Physics) Final School.*



hidden by a cliff. I am lying at full length in a basket-chair and the sun is shining on me. So I am better placed than when I received your last letter, for then there was no sea and it was raining. But I ought not to complain of Malmesbury, for I was staying in a most delightful house with an old pupil. (Doesn't that sound ancient?)

There is an old Abbey at Malmesbury—a good deal of it has fallen down, and the remainder is used as a parish church. The town itself is one of those restful agricultural places that in this age of coal and iron seem to stand still.

I went from Malmesbury to Oxford, and saw Irving there. I stopped at Cheltenham on my way from Wales. Cheltenham is a lazy place—everybody seems to be taking holiday. It is a case of nobody working except those who take care of the lazy people. Perhaps this is like the whole world beside.

I am here in the house of Professor Monier Williams of Oxford. I coach his son in elementary physics, work I like well enough, though it sometimes tries my patience.

I saw the 'Agamemnon' at Balliol in June, but it was all in Greek, and, without a dictionary and time, I don't understand Greek. I am very glad you enjoyed it. I did, even though I only knew roughly what was going on.

Have you read your German novel? You have a lot of trouble in store for you, for I shall ask you to teach me German. But I shall be a good pupil, because I know a good deal of grammar already.

I don't agree with Miss Martineau's criticism of Charlotte Brontë. I think Charlotte Brontë is right when she describes 'a woman's being loved as a necessary condition of woman's happiness in life.' It is true of a man also. I suppose what Miss Martineau rebels against is its being more necessary for woman than for man. Charlotte Brontë never—does she?—says it is; Rochester is at least as dependent as Jane. But although she never says it, I imagine it is so while we live as we do, for men do more than women, are more fully occupied—is it not so?

*September 2nd, 1880.* Ventnor.—At sight-seeing I am more than an indifferent performer. I am truly a bad one, except perhaps for landscapes and the beauties of Nature.

*September 12th.* Ventnor.—Have you been merry all alone? Do you like it? Generally I don't. I always read at meals then, instead of chattering, or better still listening to chatter.

I had a letter from Irving this morning. He is going to start from Southampton on Wednesday morning. I shall go there to meet him and give him a last shake of the hand for a long time. It is very sad to me; nearly all my friends have

left Oxford now. Next term I shall feel very old there. It makes me very glad to think that Jack [Wills] is coming.

I am not going to lecture next term, but I am going to demonstrate to men working in the Physical Laboratory. This will only take up two or three hours a day, so I shall take a few pupils in Mathematics or Physics in addition. I have the prospect of a tolerably pleasant term. I am glad I shall see you soon. Time passes though it drags.

*October 3rd, 1880.* Oxford.—Coming from Stokes Bay to Bishopstoke I was the witness of a happy scene—a soldier, who had been away in the West Indies for four years and had just got 56 days furlough, was travelling up with his newly found wife and child. He was unable to restrain himself from expressing his joy—his cup ran over very much. His little girl was playing with a pony shoe which she had picked up, and his interest in the bit of iron was immense.

I am going to change my lodgings next term. To-morrow I must go and see my things arranged in my new rooms. They are bigger than the ones I am in now. They are in a dismal street named John Street, and the number of the house is 50. The landlady is a certain Mrs. Franklin of good repute, and Irving found them very comfortable last term.

*October 10th, 1880.* Swansea.—I came in about one o'clock yesterday from paying a very sorrowful call. A friend whom I have known for twenty years—that is, we were small things together—is dying of consumption, and I wanted to wish him good-bye before he started for Mentone. I called yesterday morning and found him just gone. This does not matter so very much because I spent some hours with him earlier in the week, but his friends gave me so bad an account of him that I feel I shall never see him again. I think doctors sometimes recommend people to go away when it would be better for them to stop at home quietly; if the air is worse, the care is much greater. He has a young wife—they were married two years ago and she is not yet 20. It must be terribly sad for her.

I am always puzzling myself about my future course. To be a professor at a place like the College of Science—Mason College—at Birmingham: I daresay such a life is very pleasant, but they pay one so very little. I begin to feel myself avaricious, but hope that I shall get a great many pupils next term so that I may make a lot of money.

If you were told you must listen to a Science Lecture, what would you like it to be about? I have half promised to give one here some time during the next six months, if I can find a good subject. I have thought of Light as being a very important thing and first created: and the Conservation of Energy as being the principle most distinctly the product of this century's

research. Last century they knew that they could not make or destroy matter, and in this they have learnt that energy is equally indestructible and not to be created. So that all change is a transformation without alteration of quantity, and all apparent creation but a rearrangement.

After this term had begun he wrote more cheerfully :

*October 15th, 1880.* 50 John Street, Oxford.—Ever since I came up I have been reading examination papers, not that there are very many to read, but I am new to the work, and I find that our marking takes some time. But I have nearly finished, and the papers I set did not seem to have been too hard.

My work in the Laboratory does not begin till next week—Tuesday or Wednesday.

I am not going to be alone after all. A brother named Leifchild is coming up in a few days, and during this term at any rate will live with me. He wants to get a scholarship before he matriculates, and I shall be able to help him in his work.

I have just seen a great friend of mine named Poulton, who is up here like myself. He has just got engaged to be married and is very happy. His future wife is Miss Palmer of Reading, daughter of him whose name you will have often seen on biscuit tins, and who is now M.P. for Reading. Whenever you come here you will see Poulton ; he is a very delightful fellow—perhaps, as some people say, too effervescent : but that is no great fault and will cease with age. We were schoolfellows at the age of nine.

It is the first day of term, and I suppose Jack will return here this evening.

*11 o'clock.*—I have seen him : and he is located in the rooms of an old friend of mine, Tom Clark, an old Fettes College boy ; he looks pretty well and I was very delighted at seeing him. He smokes a pipe now, having learned in Colorado to enjoy that luxury. Do you know that I am trying to reduce my smoking within very moderate limits indeed ?

Further, I have grown some whiskers, and all my friends up here tell me they do not suit me.

I have finished the examination papers and have just handed in the results. Meeting Jack has given me a breath of Switzerland.

*October 21st.* Oxford.—I think you are very wise in what you say about what money can do and what it cannot. I am sure it is always possible to be happy without very much, though if there is not enough to make, as they say, two ends meet, without a perpetual struggle, life may appear very hard. Luxuries one may easily do without for the sake of something greater than them all.

About demonstrating. In itself it is not very good, but it is a good stepping-stone to a Fellowship and to provincial chairs.

*November 3rd.*—After dinner I am going to pay a call on a married friend of mine here named Arnold Toynbee—an admirable man, not strong but working up to his strength. He is a teacher of Political Economy here—and is earnest enough to try to reform the Church. He was married last year to Miss Atwood. She takes great care of him and has a considerable knowledge of science. Her mother was, I think, a friend of Faraday's.

I am going to dine at Merton this evening with Watts—afterwards we are going to play whist. I play an average game amongst people who don't always play at clubs.

In a note of November 4 occurs this sentence. 'A friend of mine named Reichel<sup>1</sup> has just got an All Souls fellowship—I have just seen him after his success. He has worked ever since I have known him, with greater regularity than I have seen in any other man.'

*November 14th.* Oxford.—I have had bad news from home. My father has been ill for the last week: he has violent attacks of asthma: the doctors do not think it dangerous, but it is very trying to him. I have tried to persuade him to go to the South for the winter; but he is so newly home, he shrinks from moving anew.

All this week I have not had much time for my experiments, but I am going on again with them to-morrow.

I have been reading some *Fors Clavigera*. It is a wonderful madness. As an antithesis I have too been reading Newton's optics, his original experiments and reasonings.

*November 17th.*—*Fors Clavigera* is a series of letters which Mr. Ruskin has been writing to the working man of Sheffield, originally, I think. They are about everything, literature and art and religion, and last but not least Mr. Ruskin himself. He is never so wild as when he writes them, except when he writes to Glasgow students, and yet here and there one comes across very beautiful things. In it, somewhere or other, there is a most beautiful version of the story of St. Ursula by James Reddie Anderson of Balliol, but not in the volume I have been reading.

*December 8th, 1880.* Sketty Hall, Swansea.—There was a large dinner party here on Thursday: the guests were mostly old people. Only one was young—Miss G. C., who, when she was at Queen's College, Harley Street, had learned Geometry

<sup>1</sup> Afterwards Principal of the University College at Bangor, and associated with Viriamu in his work for nearly twenty years.



from Miss Eliza Orme. This lady (Miss Orme) is the only practising lawyer of her sex. I used to meet her at dances at Professor Henry Morley's. Notwithstanding her legal acquirements, so far as I remember she dances very well. It is a thing to be learnt, and if one can learn it, it is a valuable accomplishment.

I went to call on Mrs. Clifton, wife of my Professor. The Professor joined us presently and was as usual delightful. I never told you his peculiar habits, did I? He goes to sleep about ten at night and wakes at about one or two, and then he has a meal and sets to work : at five or six he again goes to bed and finishes his sleep. He breakfasts about eleven, lunches about five, and dines about nine. He prefers doing all the hard work at night because there is then no chance of his being interrupted.

X From the Cliftons' I went to Professor Green's to see if I could find an old friend who is a second cousin to Green-Vaughan, nephew of Dr. Vaughan of the Temple. He is now a master at Clifton, and I had not seen him for a long time. I could not find him, and asked if I might run him to earth at about half-past nine. I had promised to take my brother to dinner with my dear old friend, Mrs. Monier Williams—this was at seven. We went, and after dinner met the long American friend of Jack's and listened to some music. At half-past nine I again hunted Vaughan and found him sitting in an arm-chair with a big beard.

*December 12th.* Oxford.—I only quoted Rochester's words because they expressed my meaning so well : and though through the book Rochester may have been savage and ill-mannered, yet when he was maimed and blind and said those words he had much altered. I do not think Charlotte Brontë means one to take Rochester as her type of the ideal man. Surely not. The object of the book is to show love's work on a man domineering perhaps from birth and rendered positively savage, ill-mannered, and, if you will, at times brutal by pitiless circumstance. George Sand wrote a love story called 'Mauprat,' and the hero is in worse plight than even Rochester—to begin with, the merest animal ; but elevated by the woman who loves him into a noble man, though his later life is an expiation, for the lovers never marry.

George Eliot may be more refined—so may 'Lorna Doone.' No doubt they are, but Charlotte Brontë is more real than either. You don't know, how could you? The wonder is how could she !

*December 30th.* Swansea.—So my sister has been telling tales of my impatience, &c., &c. Do not think of me as impatient or unhappy in the present. 'Not so, I am too much in the sun'—as happy as possible. It is only that one's aims are becoming



more definite—and one thinks therefore more of realising them. You know what one thinks of most one tends to do. Let a man look over a cliff and picture to himself the act of falling, very vividly, and he must be careful or he will throw himself off. Let a man think of crime, and the imagined act, almost without will of his, will be done. And so let a man think of good and dwell on it, and unconsciously his acts will frame themselves as they should. I do not mean that this is all, but it is part account of man's acts. Who thinks great thoughts will do great deeds. And so let me think of our future together, for it will come the sooner.

I have never read 'The Subjection of Women.' You know I don't need to, because I believe they should be man's equals. You heard me even advocate giving them votes at Mrs. Paterson's, and I am of opinion that the London University is right in giving them all their degrees, treating them in examination just like men.

*January 27th, 1881.* Oxford.—I am sitting here while Poulton is eating his dinner. He came round to fetch me. He is going to be married on April 5th in London.

He has asked me to go to the wedding, and, as there is no one from whose wedding I should less like to be absent, I will go. I have to give my first lecture [as Demonstrator] at the Clarendon Laboratory. I do not know how many are coming, but I hope there will not be fewer than eight or ten.

*January 31st, 1881.* Oxford.—I have two pupils. One of them will, I think, do well. The other, I am not so sure of: he has idled his time away to such an extent that the College have determined to take away his Scholarship. It is very hard to break away from idleness. I have noted it here in many of my friends; and the man who has idled for two years and then can cure himself of it is rare and has stuff in him. Two great friends of mine utterly failed.

*February 2nd, 1881.*—I think that from what I have seen most women, but not all, serve mankind most by making their men work better. It is a secondary influence, but a very great one, they have exercised on the world's history, hitherto.

I hope I am not incoherent. It is excusable if I am. Poulton and my brother Leif, who has just got a Scholarship at Trinity, are setting one another quotations to guess, and the room is the Tower of Babel.

*February 8th.*—This evening Heaton of Brasenose has been reading some German to me, a History of Physics by Potzendorff. We have been reading of Galileo, of the behaviour of the Pope and Cardinals to him. He is not so badly treated as I thought. True, he was summoned when he was 70, and made to call accurséd and false the thing he knew to be true. But

probably they did not torture him, and the subsequent imprisonment was of a mild description.

*February 9th.*—Last night I dined at Christ Church with Monier Williams. After dinner a music teacher came to his rooms, a Swede named Vogelsberg, and a man, I believe, of great talents. He said that England was different from Sweden in this—that here men of great possessions were not very intelligent—like Gallio, ‘they cared for none of these things.’ They could hunt, and they could fish and play games, toy miserably and shamefully ill with some of the fine arts, but nothing else; read nothing but the papers, and were intellectually a poor lot; ignorant, though as he granted sharp; I suppose he meant of considerable natural talents. There is an accusation against our nation. I could not deny it: and was obliged to be content with pointing out how hard it is to work if there is no need.

*February 21st.*—Last night I dined at Jesus with Ritchie.<sup>1</sup> It was a gala night there. The Sub-Committee of the Privy Council who have been enquiring into Welsh Education were there. Amongst them was Lewis Morris, who wrote the ‘Epic of Hades.’ He is, as perhaps you know, a barrister, but he has never cared to practise much I think. He is not like a poet to look at, but big, burly, and like a country gentleman, and also, like the Master of Balliol, cultivates a double chin. Henry Richard, member for Merthyr, a Radical ‘peace-at-any-price’ man, was there too. He is a fine-looking old fellow, rather like a retired skipper, with bigger eyebrows than anybody.

*February 24th, 1881.*—My lecture is to-morrow morning, and they are getting on pretty well judging by the attendance of the men, which is pretty regular.

I have got a new pupil who comes to me three times a week—a clever man who is in for the Honours School of Physics in the summer. I have to keep my wits about me when he is with me, so it is good for me. There is no method of obtaining very accurate and thorough knowledge so good as teaching it to some one who is intelligent and asks good questions.

Last Sunday afternoon I heard the Master preach. He preached on the Saint and the Philosopher, and how far they could be combined in one life to-day. Bunyan was his type of Saint, Spinoza of Philosopher—living at the same time, you remember. There was a good deal about them, but too little about the possible combination.

I have been a delightful walk this afternoon. It is the first sun we have seen here [Ventnor] since I came, and the Downs were fragrant. Spring-sunshine after rain is so very beautiful—poets use it to point a moral often enough, don’t they?

<sup>1</sup> David Ritchie, Professor of Logic and Metaphysics in the University of St. Andrews: sometime Fellow of Jesus College, Oxford. Died 1903.

*February 28th, 1881.* Oxford.—I am now going to a meeting of the Church Reform Association in Oriel Common Room. I do not know how the Reform is to be effected, but I shall hear the plans to-night from Professor Green and Mr. Llewellyn Davies.

*March 1st, 1881.* Oxford.—I have been very busy all day. At 10 o'clock I had a pupil, at 11 I was due at the Laboratory. I remained there till 1.15 and then came here to lunch, back to the Laboratory at 2 o'clock; there till 5.15, and it is now 5.22.

At 6 o'clock I have to be at Jesus to dine with Hawker Hughes, and at 10 o'clock I have another pupil.

The Church Reform Union meeting last night was not, I think, a very great success—still I was glad to hear their objects. The chief one at present is to establish Parish Boards who shall exercise some control over the Parsons. Next in their programme comes, I think, the complete abolition of Subscription.

I saw Jack there, and afterwards went to Brown's to have cocoa.

*March 6th, 1881.* Oxford.—I have been in the Laboratory all day. The best place for one since it has been very wet. I am still experimenting on salt water but in another way, with the same object, but the experiments are all preliminary, and what I have in view will perhaps be a long affair.

I breakfasted with Poulton this morning. There Jack came in. He told me he made a speech on Spiritualism on Saturday night, in which he said that it must be true because there could be no doubt about the Witch of Endor.

He utterly misled the opener as to his true position, who said, when he found himself alone on his side in the voting at the end, 'at least I should have one on my side if Wills were here' (Jack had gone). What do you think of that for a satirical cousin?

I must stop for I have to attend to a pupil who is diligently scribbling answers to some questions I have set him.

*April 8th.* Swansea.—When I wrote last I was paying a call on Mrs. Hughes, who said she remembered me as a very beautiful baby, two or three days after I was born. If so, I was most exceptional, for as a rule humanity is not at that age very lovely. I suppose it is want of exercise of everything but lungs.

On Wednesday morning I did a little work, a very little, for I was persuaded to turn my attention to carpentry and make a fretwork bracket. I thought I had better learn to work ordinary tools for our house. The bracket is not yet quite finished but the pieces are, and now I must be joiner. In the afternoon I played tennis, but the wind made too much sport with ball and racket. This afternoon we are going to drive to Gower, which is the part near here corresponding to Heaven.

I have made up my mind, if nothing new happens, to send in

my name for the High School. I shall begin to write my letter of application soon—things I don't like.

*April 12th, 1881.*—Certainly we must not make sure of the High School appointment. I shall care the less because I am a little doubtful as to whether I should be doing right in leaving science.

*April 17th, 1881.* Swansea.—Why do I apply for the High School appointment when I am not sure it is best? Because it is sure to be hard, but I think it is a good thing. I shall apply; do not build hopes too high. Crime of youth is often punished by lack of success. Luckily it is a fault that will mend, and bye and bye I shall be one of the grey crowd crying out the commandment, 'Thou shalt not be young.'

*April 21st, 1881.*—A man should take care that his education influences him aright. A man of high birth is foolish if that influences him to think those who are not so are not the men for him to mix with. A Christian or Brahmin makes a mistake, as most of them do, when he will not hold converse with a Brahmin or Christian. And I think a man of culture should be able to hold converse, without perpetual irritation of his susceptible nerves, with those inferior to him in knowledge and refinement. Otherwise it is ill with him in this workaday world, unless he can shut himself up with a select few and let it bustle about unheeded outside.

*April 25th, 1881.* Oxford.—I think I am going to be busy this term. I have heard of a good many pupils, but I don't exactly know yet how many I shall have. Two or three days will show.

My application to the High School Governors must be made this week; the last day for receiving them is May 1st. I sent in yesterday an application for the post of Principal of Firth College, Sheffield. I had not intended to send in, but I saw [Professor] Clifton yesterday afternoon, and he thought I might have a chance, that at any rate it would do no harm to try; so I had to spend yesterday evening in writing to the Council of Firth College instead of finishing my letter to you. Please don't say anything of this; applications unsuccessful are best untalked of. To-day was the last day for sending in, so I had to telegraph this morning to the Registrar to tell him my letter was on the way. The successful candidate is to be Professor as well as Principal, and is to receive half the fees of his own classes in addition to £500 per annum.

I heard the Master preach yesterday. The sermon was on Ignatius Loyola, who through the Society of Jesus checked the Reformation in Europe, enjoying perhaps more than any other man the reward of seeing the results of the work of his life whilst still here among men. At the end of the sermon he spoke of the



Earl of Beaconsfield. There are none, he said, upon whom so much abuse, such long-continued and bitter vituperation have been poured ; but that this is not the final judgment is proved by a nation mourning over his grave. I have been reading ' The Vicar of Wakefield ' for the first time, finished it this evening. It is a very charming style, pithy, and worthy of many readings.

*April 30th.*—I will send my application to you as soon as I get it from the printers. I am less hopeful of result even than I was. Ah, why am I so young a man !

On May 6, 1881, Brynmôr inquires :

How are you getting on ? Write and let me know what pupils you have ? Do you still lecture ? Have you applied for the Firth Professorship ? Stands Oxford where it did ?

And again on May 10, 1881 :

I am sorry you are trying for the High School (Oxford). It is absurd to connect your life with a new Institution of the kind. If it fails, you will have to start again as a failure. No immediate gain is worth risking that. Excuse my directness. I do not wish to damp your ardour in any scheme, but I do wish you to recognise the serious consequence to you of joining your career to possible ill-success.

After Viriamu's appointment on May 19 at Sheffield, Brynmôr wrote : ' They seem delighted at home with your success. Hartland writes to me congratulations.'

The application for the Sheffield post was evidently made in spite of Professor Clifton's opinion of Viriamu's scientific promise, his brother Brynmôr's emphatic advice, his own diffidence, and information from Mr. Charles Firth, nephew of the founder of Firth College, that the College income depended on subscriptions, and left a yearly deficit of £400, that the number of students was very small, and there was no physical laboratory.

He wrote on May 15 :

I shall be obliged to come back here (Oxford) early on Wednesday morning (from Birmingham), for on Thursday I have to be off again to Sheffield. You will be glad to hear that I am one of five selected candidates. We are all summoned to Sheffield at noon on Friday, and in the afternoon the thing will be decided.

I do not think they will give me the Principalship : still, there



is a chance. What I expect is the offer of the Professorship in Mathematics and Physics, which I am not sure I shall take. Of course they may offer me neither. But the fact that I am summoned justifies my application. They really want to see me—offering expenses.

*May 18th.*—I have been so very busy. I lectured this morning. Subject—the Mechanical Equivalent of Heat, *i.e.* the rate at which heat is produced when work is spent in generating it. I hope they understood it—but it is somewhat difficult for the preliminary intellect.

*May 26th, 1881.*—I saw Dr. Percival<sup>1</sup> yesterday and had a talk with him about Firth College. He was very kind in offering advice and all assistance in his power.

On May 19, 1881, Viriamu Jones, one of sixty-seven candidates, was appointed Principal and Professor of Physics and Mathematics at Firth College, Sheffield; he also undertook to teach geology.

Congratulations poured in from his family, friends, and teachers, but there was a note of warning in his father's message sent through his stepmother on May 22 :

Leif wrote you our congratulations. It must be a tremendous thing for one so young to be at the head of such a College. Papa is, and so am I, very anxious about you. We are most proud of the honour, but it is a great responsibility. I wish you were five years older—in that I do not suppose you will agree with me.

Among his testimonials was a letter from Professor Alfred Goodwin, Fellow of Balliol and Professor of Greek at University College, London, with whom Viriamu worked up the 'Pass' classical subjects.

The open-minded interest and thoroughness of application which he brought to bear upon subjects apparently alien to his specialism impressed me much at the time. I think Mr. Jones, apart from his scientific attainments, about which I am not able to speak, a man of culture wide enough to sympathise with the many forms of learning likely to be gathered in an Institution like Firth College.

The representatives of the University of Oxford on the Council of Firth College were Professor T. H. Green (after his death, Arnold Toynbee) and Dr. Percival, President

<sup>1</sup> President of Trinity College, Oxford, 1878-87; Head Master of Rugby, 1887-95; Bishop of Hereford, 1895.

of Trinity College, Oxford—all three friends of the new Principal.

On June 30, he wrote :

On Tuesday was the Meeting of the Council. To-day I have had to consult with the President of Firth College, the Rev. Mr. E. Earnshaw,<sup>1</sup> on the Prospectus.

Mr. Stephenson [afterwards Sir Henry Stephenson] and I have just been calling on a millionaire—Mr. Jessop. If he were to give £50,000 to the College he would not miss it.

*July 1881.* Swansea.—I expect I shall have to be at Sheffield on the 16th or 18th. I am on the look-out for a book of Biography of Scientific Men. I hope to give a course of such lectures some time or other. I have not seen my Father yet. He has been spending a week or ten days at a place called Llanwrtyd in Mid-Wales, and is, I am glad to say, much better for the change.

My sister is translating some Breton folk-lore from the French. She read me a story last night about a white blackbird who could make old people fifteen again, and a Golden-Haired Beauty. There was a fox in it playing the part of Puss-in-Boots. The old stories in many countries are very much alike.

I have been reading a good deal of Draper. It is interesting, and I cannot somehow begin making my lectures on Geology—give me some remarks on 'Knowledge is Power.' Proverbs by frequent repetition become old and worn out, hollow shells and empty formulæ. The above seems to have a spark of vitality left in it still.

*July 13th.*—On Saturday I went to the Mumbles and the Bays with my sister and two or three people. It came on to rain : I advocated returning, but the ladies were determined to go on, so frail man had to give way to such superabundant energy. We took tea in the rain in a cave ; we all got more or less wet ; but we kept up our spirits and hoped for better times, which came in the evening, which was lovely. I made the ladies run races on the sands to keep them warm. It was a mad expedition but we enjoyed it. The fruits of it were not so pleasant—an attack of rheumatism for my sister—the proof of my wisdom in desiring return.

Since then I have done little in the way of recreation but play tennis. As I told you I disappoint myself by not improving.

To leave Oxford was a great wrench.

I spent this morning in tying up letters and papers into

<sup>1</sup> Chaplain to the Parish Church of Sheffield and Honorary Canon of York.

bundles, preparatory to packing. I feel very sorry at leaving Oxford somehow. I suppose because the place is so beautiful, and more than ever so in such summer weather as to-day.

He had undertaken the task of directing an institution that was as yet insecure ; he was exchanging the congenial society of Oxford for that of a northern manufacturing town, many of whose leading men were prejudiced against the College and did not believe in education, and he was only five-and-twenty.

After a short holiday at Swansea he went from Sheffield to the meeting of the British Association at York, and wrote from there, early in September :

I have been wandering about the country, and always find it hard to write when I am in that condition of unrest.

Left Swansea on Tuesday, spent a night at Sheffield, transacted business yesterday morning, and came on here just in time to hear the address of the President, Sir John Lubbock.

*September 5th.*—On Friday night I heard Professor Huxley deliver an address to an immense audience. His subject was the History of Palæontology. It was a summary of the history of the science of remarkable power and insight. I felt all the time when he was speaking 'There is no one, sir, in all this vast assembly, who could do what you are doing as you are doing it.'

Most of my mornings are spent in Section A, *i.e.* Physics and Mathematics.

On Saturday I went with Poulton and Mrs. Poulton to Hawkwick, the other side of Yorkshire. His cave—Dowkes Bottom Cave—is there. He has been digging at it for a month. I stopped here in order to go and hear a lecture in Electrical Discharge by Spottiswood. The experiments he propounded were most brilliant and beautiful.

I have been nearly all day in the Physical Section. To-night there is a *soirée*. It is a curious medley of science and social amusements.

A few days later he was settled in Sheffield.

## CHAPTER II

### SHEFFIELD

Blessed is he who has found his work ; let him ask no other blessedness.—*Carlyle*.

EVERYONE who knows Sheffield only as it appears when approached by the railway, would certainly subscribe to the first part of Horace Walpole's description of it as 'one of the foulest towns in England in the most charming situation.' Foul indeed is the fog which at times hangs over the low-lying parts of the town, and which, when the wind is in the south, threatens the broad suburbs and has left its sombre stain on the handsome city buildings. Yet the number of hours of bright sunshine recorded at Sheffield in the years 1905-1909 exceeded that recorded of London, Edinburgh, Dublin, and of the seven largest manufacturing towns in England, and the sun changes even choking metal dust into such a golden haze as transfigures the dingiest alleys.

Not even the dense smoke of Brightside can touch 'that most charming situation'; the gracious contours of the hills, rising to 600 and 1000 feet above sea-level, remain, and the open dales, whether their slopes are chosen for pleasure gardens and stately houses or for artisans' dwellings; the Don and its four tributary streams still make music as they descend from the moors, gathering volume as they pass down the valleys in which the city lies. However great the industrial expansion of Sheffield, the ancient glory of her hills and moors will still encompass her.

Her rich iron and coal field, worked since the time of the Roman occupation and perhaps earlier, was developed for modern purposes in the period of England's commercial supremacy in the early part of the nineteenth century; it had produced wealth with marvellous rapidity and, in 1881, Sheffield was a large and prosperous city. Eighty years ago, but three tall chimneys smoked in Sheffield, and even now you may shoot grouse a few miles from the Town Hall. Thirty years ago, in the woods of Ecclesall, along the river-bank, Viriamu Jones was able to see cutlers, as of old, grinding their knives upon the water-wheels.

And here, as often happens, wealth came before culture. As late as 1881 men who had helped to make Sheffield prosperous frankly declared that they had gained their knowledge of manufacturing processes and turned it to account by rule of thumb, and saw no reason why their sons or anyone else's should be educated.

Yet efforts had been made for higher education in deference to Ruskin's plea for the study of art in our big towns, and a museum had been opened at Sheffield to receive the treasures of the St. George's Guild—precious stones, gorgeous agates and crystals, famous casts and studies of architectural detail, water colours, illuminated manuscripts ranging from the tenth to the sixteenth century, and Ruskin's own exquisite drawings of birds' feathers. Here, too, were housed the famous 'Madonna and Child' by Verocchio, one of the great pictures of the world, and many engravings, above all, Turner's 'Liber Studiorum' and his 'Rivers of England.'

Of the reason for placing his museum in Sheffield, Ruskin said :

I acknowledge ironwork as an art necessary and useful to man, and English work in iron as masterful of its kind. There is the further practical reason for our first action being among this order of craftsmen in England, that in cutler's ironwork we have (in the town of Sheffield) the best of its kind done by English hands. Not for this reason only, however, but because Sheffield is in Yorkshire, and Yorkshire is yet, in the main temper of its inhabitants, Old English, and capable, therefore, yet of the



ideas of honesty and piety by which Old England lived ; finally, because Sheffield is within easy reach of beautiful natural scenery and the best art of English hands.

A Sheffield Medical School<sup>1</sup> was opened in Surrey Street in 1829, and for six years there were two Schools of Medicine in Sheffield, for at the same time a Dr. Overend, who, following the custom of provincial doctors of that day, took pupils to prepare for hospital training in London and whose museum had been the centre of medical education in the district, secured recognition for his own academy as the ' School of Anatomy and Medicine.' In 1835, however, this came to a sudden end at the hands of a mob which had been roused to frenzy by the rumour that some one within was being done to death for the sake of his body. The other Medical School survived these evil days, and work was carried on in the original building till 1888.

In 1851 a local meeting pressed for the application of the surplus funds of the Great Exhibition to the establishment of a Central College of Arts and Manufactures. In 1862, under the stimulus of the second Exhibition, an attempt was made by Dr. H. C. Sorby and Mr. (afterwards Sir) John Brown to interest the citizens of Sheffield in the establishment of a School of Practical Science and Metallurgy ; and in the following year the former, whose fine series of sections are still in use in the micrographic laboratory of Sheffield University, founded the science of Metallography. A third effort was made in 1871 ; but it was only after the successful reopening of Firth College under Viriamu Jones ten years later that these projects began to take practical form. The idea of a People's College was first conceived by the Rev. R. S. Bayley, a Congregational minister. In 1842 he had opened his College

<sup>1</sup> Professor J. A. Green, M.A., Sir John O. Arnold, D.Met., Professor A. McWilliam, M.Met. A.R.S.M., and Professor Ripper, D.Eng., M.Inst.C.E., M.I.M.E., of the University of Sheffield, have described the origin and gradual growth of these departments in a series of articles prepared for the visit of the British Association to Sheffield in 1910. For the present use of these articles they and Dr. William Porter, the Editor of the Handbook, have kindly given permission.

to men and women alike in a whitewashed garret, giving classes before and after working hours, at a fee of 9*d.* a week, in Latin, Greek, French, German, Mathematics, English Literature, Logic, Elocution, and Drawing, and teaching for the most part himself. The success of this undertaking greatly depended on its founder's zeal; but before Mr. Bayley left Sheffield in 1848 the College was declining fast, and was only saved by the efforts of sixteen young students who drew up a scheme to be worked out by themselves. It was to be self-supporting and self-governing, though the Committee did not possess a single book or a farthing to invest in furniture. But their faith was justified by results: the College provided day classes, and five years later scientific and technical classes, and this amateur institution numbered six hundred and thirty students in the session 1850-1. Professor J. A. Green states that 'the success of the Sheffield People's College had more than a local interest.' Frederick Denison Maurice says that the Working Men's College in Great Ormond Street owed its existence to the pioneer work of the Sheffield institution—'we were plagiarists from the Sheffield people.' But the London College was not so democratic as the People's College at Sheffield (which lived on for forty years): it did not admit women to its classes, and gave no share of the government to its students.

In 1867 Professor (then Mr.) James Stuart gave some lectures in Sheffield and other northern towns, and five years later persuaded the University of Cambridge to make a scheme for University Extension Lectures, and Sheffield entered into the idea eagerly. That particular proposal was shelved after discussion by the Sheffield School Board; but a popular movement followed, and the first series of Extension Lectures in connection with the University of Cambridge began in January 1875. At the end of three years, 3566 tickets had been sold, and Mr. Mark Firth, then Mayor of Sheffield, saw and supplied the need of permanent quarters. In 1879 Prince Leopold opened the Firth College, which cost the generous giver £20,000, besides £5000 which he gave towards a Chair of Chemistry. Next year

Mr. Mark Firth died, and Sheffield lost one of her most public-spirited citizens.

Viriamu Jones almost immediately conceived the hope of creating in Sheffield the greatest Metallurgical School in England. With Sir Henry Stephenson he drew up a plan for starting a Technical department for Mining and Metallurgy; and this department, the nucleus of the Metallurgical School, united with Firth College, which was to furnish the faculty of Arts and Sciences, and the Sheffield School of Medicine were to work together as the Hallamshire University. The project was not realised while Viriamu Jones was in Sheffield, but was ably carried out by his successor, Principal Hicks, D.Sc., whose work so greatly contributed also to the establishment of the University of Sheffield.

The condition of Firth College laid no light burden on the Principal; in a letter of March 1882 he himself described it as 'a College that had to be raised, as it were, from the dead.' It had been opened with insufficient endowment three years earlier, in 1879, and had experienced the hard vicissitudes through which provincial colleges must struggle for existence, and some of its staunchest supporters had feared failure. Its teaching had at once to be reorganised, its scope defined and publicly explained, its funds established and secured. Even the name of the building was a hindrance, since some of his fellow-citizens who cared for education cared not so deeply as to support a college bearing the name of an individual and, in their eyes, therefore, rather a personal memorial than a civic institution.

The academic members of the Council were Dr. Percival,<sup>1</sup> Professor T. H. Green,<sup>2</sup> and several prosperous citizens of Sheffield who held enlightened views on education; since the death of Mr. Mark Firth, they had carried on the work of the institution under many difficulties. Among them was Sir Henry Stephenson, who acted as Treasurer. In his life-time his sagacity and high character won respect and devoted affection, and his memory will ever be honoured in

<sup>1</sup> President of Trinity College, and afterwards Bishop of Hereford.

<sup>2</sup> Succeeded by Arnold Toynbee.

Sheffield. The President was Canon Earnshaw, who had been Senior Wrangler and First Smith's Prizeman ; <sup>1</sup> other members were Dr. H. Clifton Sorby, F.R.S., and Mr. Samuel Roberts, whose son now represents the Ecclesall Division of Sheffield in the House of Commons—men of wide views and influence and active workers for the College.

It is no matter for surprise that Sir Henry Stephenson, one of the best and wisest friends of Firth College, should have felt some misgiving at the appointment of Viriamu Jones. He wrote in after years :

He was then only in his twenty-sixth year, and notwithstanding his attractive personality and brilliant record, some hesitation was naturally felt by the Council as to whether it was prudent to place so young a man in so responsible a position.

This hesitation did not last. Before long many of the Council had become the Principal's friends and were anxious to ease the burden of office for him—anxious even for his health and personal welfare. On his side, as he found a body small indeed, but united, so he also found himself in one of the greatest of English cities with a civic patriotism and great and growing wealth. He had no need to fear that faith or support would fail him in a good work well begun.

His letters show that, besides attending to the regular duties of his post, he at once began to make plans for the future of Firth College.

*June 12th, 1881. Oxford Union. Oxford.*—If I come to London on Saturday, could you take me to Professor Huxley's ? I want him to come to Firth College in October and give the opening address for next Session.

I had a tolerably pleasant time at Sheffield. I was busy overhauling the apparatus and getting ready the prospectus.

<sup>1</sup> Chaplain of the Parish Church, Sheffield, and Honorary Canon of York. Mr. Ensor Drury, Registrar of Firth College 1879-1902, recalls the interesting incident of Mr. Earnshaw's refusal to take the Doctor's degree at Cambridge, a compliment which his friends had arranged should cost him nothing. Remarking 'that "Doctors" were as plentiful nowadays as blackberries,' he said if friends wished really to give him pleasure they would instead pay off the debt on the Girls' Charity School at Sheffield—which was done.



I went to Principal Bentley's on Thursday and found one of the nicest men I have ever met.

One end of Sheffield is very pleasant and not very smoky and very near the moors over which the west wind blows into the town the major part of the year, sometimes, it must be confessed, bringing rain and Scotch mist.

After he had settled in Sheffield for the Session, 1881, he wrote : <sup>1</sup>

I have an added burden to bear. The Classical Professor—Brabant—has resigned and we have to find a substitute. I don't suppose a new Professor will be elected till Christmas at any rate.

My work is getting on tolerably—the speech is getting into shape. Can you give me any good reasons why everybody should cultivate his mind? 'Good' in Sheffield has a peculiar sense, they say—it means *£. s. d.*

The speech referred to was that made at the opening of the Session of 1881,<sup>2</sup> and he gave much thought and care to it. He wrote again on September 13 :

I am still working at my Introductory Address—I have been thinking this morning of Popular Work (the other departments I mention are University Work, and Technical Work). I consider that its object is to arouse and maintain an interest in literary and scientific subjects in the community at large. So that it is not unimportant or trivial, as some say.

(1) Because an enlightened interest in some branch of literature, philosophy, or science is the very best way of spending the leisure of a busy life.

(2) Because the stimulus given to the young by interest taken in their work by their elders is very great.

(3) Because the stimulus given to the investigator by the interest of the community in his work is very valuable.

(4) Such work is to be recommended to the investigator because preparation to explain to an audience whom he may consider ignorant is an excellent method of clearing his own ideas.

Can you think of any added reasons for this kind of work?

*September 25th, 1881.*—The night I arrived I found a lot of business here waiting, which kept me till after 8.30. When I drove up Penmôrlan<sup>3</sup> was playing in the garden, stared at me

<sup>1</sup> All these letters were written to his future wife.

<sup>2</sup> It is reprinted in full as Appendix.

<sup>3</sup> John Penmôrlan Maine, now Librarian to the Duke of Devonshire.



for a moment and ran in saying 'Uncle is come—Uncle is come,' and returned to be demonstratively affectionate.

Yesterday morning we lunched with the Firths, and in the afternoon we were to have gone to Wharnccliffe Woods, but it was terribly wet and I thought it better for Annie not to go; but a party of us started and I with them and we all got wet through. Mrs. Sandford,<sup>1</sup> who is wife of the chief inspector of schools here, went: she is a very pleasant woman of refinement and education.

The woods would have been beautiful but for the rain, which robbed us of the view of the country round. As it was, the walk was very pleasant—trees, even in the wet, I prefer to streets, and green pavements to rounded stones. We all had tea at a little inn in the woods—an old-fashioned place, originally a hunting lodge of the Wortleys.

I have a little more speech to show under the head 'original investigation.'

'As to the rest, perhaps I may be permitted to say that Professor Carnelly has already made the Chemical Laboratory of Firth College widely known by his investigation of the behaviour of solids raised above the melting-point under diminished pressure. And I hope the time is not distant when he will find himself not alone in his researches: when he may see round him students whom he has trained actively engaged in trying to wrest from Nature the secrets which that coy lady does not reveal except after patient and pertinacious questioning.'

I have finished it, I think I may say, now, and I hope it will serve its purpose and let the Sheffield people know what we really mean to do.

*September 28th.*—I have been sitting most of the day watching one man write examination papers. I called him man; but he is sixteen and looks young for his age. I have set him Mathematics and English to-day. To-morrow he must be examined in Classics. I gave him an hour's essay on 'The Uses of Education,' but I have not read it yet. If there is anything in it of value you shall hear.

I have been telegraphing all about to our non-resident Members of the Council to ask them to take the chair at our meeting on Tuesday next. The President is ill and thinks he cannot do it. Everyone is busy, and like the people in the Bible bidden to the feast, cannot come. So I have been persuading Mr. Earnshaw this afternoon (an interval from the fatigues of examination) that he is quite equal to talk in spite of his late illness, and he has to a great extent yielded.

<sup>1</sup> Afterwards Head Mistress of the Queen's School, Chester.

I seem scarcely to have a minute to myself—the once idle and careless Viriamu does not know himself.

Yesterday I saw Mrs. Mark Firth ; she sent a message asking if I could call on her. She is as kind as could be imagined. I think I shall like her very much, and I daresay she will like me, which I should be glad of for your sake.

*October 2nd.*—The examinee did not do well—but I think I shall give him an exhibition. His Mathematics were not bad. He wrote an English Essay ; the attempt at literary style was not bad but it was very thin in meaning. I suppose that would generally be the case with boys of sixteen.

Thursday is the opening night [of the Session]. I cannot say I know my address. I shall very likely read part of it.

*October 5th.*—I must tell you about the commencement of my work here. Last night at 8 o'clock the Opening Meeting began. After a few preliminary remarks Mr. Earnshaw called on me for the Introductory Address, which I then partly spoke and partly read. It lasted about forty minutes, and people were good enough to be most attentive throughout. It was, I am told, quite the thing wanted here.

Lectures commenced to-day. I gave two in Mathematics ; I have three people in each class. A great improvement on last year, namely, numbers doubled. They are a sad lot here—only three to listen to such good lectures !

I have to prepare Geology lectures now—I have made the general syllabus and will send it to you soon. The first lecture is to be on the History of Geology.

*October 10th.*—I seem not to have a moment to myself.

On Friday I gave my first lecture in Physics ; there were five to listen. In Mathematics I have altogether about nine or ten—some doing high work, *i.e.* Differential and Integral Calculus.

I feel hopeful as regards the future. On Wednesday I am going to dine with the Mayor of Sheffield. As I don't know him and at present he has no connection with the College in the way of being in its Council, it is a kind of public recognition of my capacity as Principal—a recognition not given to my predecessor.

I have to go off now to give a couple of lectures on Mathematics. I ought to have written before. It is only that my attention has been drawn to so many things that I have had no rest.

*October 14th.*—The night before last I dined at the Mayor's. The Recorder of Sheffield (Uncle Alfred Wills) and the Bar were there ; the first was very kind and very much interested in my work. Yesterday I went down to the Court and heard a difficult case of larceny in which he summed up, very ably it seemed to me.

My work keeps me busy but is not too much for me as I feared it might prove.

*October 28th.*—On Tuesday we had a Council meeting at Firth College; Dr. Percival and Professor Green came from Oxford. It was decided to appoint a Professor of Literature and History, candidates to send in applications by December 1st. Salary £300 per annum and half fees. Green came up to tea in the afternoon. Jack and I dined with the Roberts's with whom Dr. Percival was staying. Last night I dined with the Withers Pension Trustees; the Archbishop of York<sup>1</sup> was there, and I was introduced to him.

*November 5th.*—I enclose the Syllabus of my Geology lecture; it took me an hour and three-quarters, and was, I hope, an interesting one. It was in several points illustrated by experiment, which the people seemed to appreciate.

I have four hours' work in front of me beginning in twenty minutes.

*November 6th.*—I was interrupted by Knox who came to fetch me off to meet the Rev. Mr. Paton of Nottingham (where they have started a College), who was very anxious to talk to me about Higher Education and these Colleges like my own.

There was one result of my talk with Paton—I think Goldwin Smith will come and give us a lecture on Education in Sheffield, specially addressing himself to the middle class.<sup>2</sup>

*November 7th.*—This is a beginning of a kind of journal which I can write at odd minutes. So busy do I find myself that it is hard to sit down for half an hour and write a long letter. But a long letter may be made up of little bits, and little bits may be written at different little times, and different little minutes are like pennies, they can be afforded even when gold is scarce. I do now trust that, having broken through a natural lack of energy or indisposition to enter on a new thing, I may gradually mend my way and not be afraid to speak of small things, remembering that it is of such that the life men do lead is made up.

Since I have come to this town of Sheffield and entered on a work which will doubtless, before it is finished, have filled up many years of my sojourn on this earth, there is in my mind a feeling of the solemnity of small social observances the which I have been accustomed hitherto too much to despise and neglect as of no account to the development of the soul of man. For it is apparent to me now that they may, if neglected, work great harm on the Institution over which I have been called to rule; whereas if they be properly performed and diligently discharged, they may help me in my earnest attempt to guide that Institution to a prosperity which up to this time and in other hands it has sought in vain.

<sup>1</sup> William Thomson, Archbishop of York 1862–90.

<sup>2</sup> He did not come.

*November 8th.*—Yesterday I visited the wife of our good Mayor, and it seemed to me that I had by chance chosen for my visit that afternoon of the week on which it is her custom to receive her friends : for there were many others come for a like purpose, the number being increased I doubt not by an entertainment called a ‘ball’ by which she had amused her friends to-day s’ennight. A ‘ball’ is an entertainment at which there is music both of the piano and the violin : and the young men do put their arms round the waists of the young women, each round the waist of his partner whom he hath previously solicited, and then do they move round the room, keeping time with the music with steps both pretty and various, and not to be mastered except after much trouble and teaching of an excellent sort.

But to me it is a matter both strange and difficult to understand that the young people do so rejoice when they dance a measure together : but I have been told that it is a great provocation to love and marriage. For myself it is not so. Not in hot rooms (where the chemist, if he analysed the air, would find too much of the ‘fixed air’ of the ancients, now rather called carbonic acid and denoted by a symbol  $\text{CO}_2$ ), nor amid a crowd : but in wild mountains, beneath the blue heavens where our dear mother Nature is more beautiful than she shows herself or can show herself in the crowded haunts of men, should I wish to choose my mate.

*November 9th.*—Last evening I spent with one P——, who is Section Secretary (Natural Science Section) to the Literary and Philosophical Institute of Sheffield, founded for the encouragement of learning in this town some fifty years ago. There were present also his mother and sister, the former unlearned, but the latter as talented as she is beautiful, for she is a student of the Firth College. Mr. Secretary P. hath collected together minerals and rocks—and some rocks he hath made very thin, so that they are transparent, and can be examined in their smallest structure under a marvellous instrument compounded of lenses fixed in a brass tube and called a ‘microscope.’ And these slices of hard rock where viewed by light that is called ‘polarised,’ produced by passing it through a prism of Nicol (who cut the mineral calespar<sup>1</sup> first in that form requisite for polarisation) show the most beautiful and instructive colours, which cause much delight to him that looketh thereon, and reveal many things concerning the intimate structure of the rock.

To-day I have been lecturing for three hours at the Firth

<sup>1</sup> An abbreviation probably used for carbonate of calcium or calcareous spar. Iceland spar is now used for nicol prisms. The three substances are practically identical and are amongst the crystalline substances used for double refraction.



College on the Mathematics, both elementary and advanced. But those doing the highest work are but few, and to-day no more than two, one male and one female, as in the garden of Eden at the first. And they are both teachers, I being a teacher of teachers as an emperor is king of kings.

*November 13th.* Sheffield.—Three days since I have written anything of my journal.

On Thursday night I supped with C. H. Firth,<sup>1</sup> one who was my friend in old times at College; there were present also Dr. Carnelly, our Professor of Chemistry, and Mr. Willans, a manufacturer of this town, sometime student of the School of Mines in Jermyn Street. We had met to take counsel together on the Technical Education in Sheffield. After some talking together we came to this conclusion—that nothing could be done at once better than to organise a course of Lectures for next term in Metallurgy, to be given, if possible, by Professor Chandler Roberts, of the Royal School of Mines, a man of knowledge and eloquence and likely to attract the unlearned and arrest their attention. This talk of ours was prompted by Alderman Mappin,<sup>2</sup> Member of Parliament for Retford, a manufacturer of Sheffield, wealthy, and conscious of the great need of this town for intellectual food. Accordingly at the conclusion, Charles Firth and I went to Thornbury, the home of Mr. Alderman Mappin, and were fortunate enough to find him at home after the work of the day, which had consisted in opening a bazaar in the borough of Retford. We told him the conclusions we had come to, and estimated the cost of the proposed course of lectures at £100; this he then generously offered to provide: and so the matter for the present stands.

Friday all day I spent preparing my Geology lecture for the evening, except from 12 to 1, when I lectured on Physics (Experimental Mechanics).

On Saturday William Wills [brother of Miss Wills] came to visit me from London. He will remain with me till to-morrow when he leaves me, greatly to my regret, to attend the Winter Assizes at Warwick. It has been a great pleasure to me to have him with me, it has relieved the loneliness.

*November 17th.*—Time goes. It is three days since I wrote in my journal.

Afterwards I called on Mr. Earnshaw, our President, who has been ill. He is beginning to have some little faith in me in spite of my youth.

<sup>1</sup> Charles Harding Firth, Regius Professor of Modern History at the University of Oxford.

<sup>2</sup> Afterwards Sir Frederick T. Mappin, Member of Parliament for the borough of East Retford, 1880-85; for the Hallamshire Division of the West Riding, 1885-95. Died in 1910.



Later still I called on Mrs. Woodhouse,<sup>1</sup> Head Mistress of the High School, whom I had not seen before. She seems an intelligent and earnest woman. She has been at the head of the School since its beginning and has conducted it to great prosperity.

*November 22nd.*—I have just been examining, with a view to purchasing, some rock-sections. Do you know that rocks (almost all) can be ground down so thin you can see through them. They make most beautiful microscopic slides: and I should like to show some to my Geological class.

I think I told you I am going to give a popular lecture on the Sun. I have changed my mind—instead of the Sun the subject shall be Electric Light.

*November 29th.*—I am crammed full of work. Professor Chandler Roberts has just written to tell me his work is already so much that he cannot lecture for us. I think we shall next apply to Dr. Percy, who will have more time, for his business is to ventilate the House of Commons. I was told this meant keeping a bit of ice there.

I did my three hours' work in the evening after arriving yesterday, feeling them to be a *bore*, which was sad. To-day, however, I am very energetic, and feel fierce over my crusade against ignorance.

*December 2nd.*—From the depths I write to you—but only from the depths of work. My Geology lecture is to-night. It is on Ice Glaciers, etc., and I hope will be very interesting.

Mr. Mundella is to be here next Monday week; I have been asked to meet him at dinner on Monday and Tuesday.

It may have been these lectures on Geology that caused his friend Jack Wills to write from Bowness when Windermere Lake was frozen in the winter of 1881:

There are curious things to be seen. Now, be a good fellow, sit down and quickly give me half-an-hour and tell me something about crystals, freezing, regelation, the relation between the booming sound of ice—especially at the edge—and the cracks which soon after appear under your foot and run ever so far?

And he wrote again next month asking for the names of a few books on the Geology of argentiferous Colorado: 'If we were at Oxford I should come to you with my usual faith and ask you to tell me about these things in a course of six conversational evenings.'

<sup>1</sup> Afterwards President of the Association of Head Mistresses.

*December 4th.*—On Friday night I gave my lecture on 'Ice': afterwards came up here and dressed, and got to Endcliffe Grange at about 10.15 P.M. It is a terrible thing to be late at a dance at Sheffield for nearly everybody is punctual—no late ladies to correspond with late gentlemen. Most of my friends had their programmes full: however, that did not matter to me, as I take no pleasure in dancing. Am I getting too old? or too grave? or too responsible an individual?

*December 19th.*—To-morrow the election of the new Professor takes place. Professor Green is going to stay with me to-morrow night.

I have to interview the candidates<sup>1</sup> to-morrow morning before they appear before the Council. Mr. Earnshaw, our President, will be with me unless he is too ill to be at the Council meeting.

In ten minutes I have a lecture.

*December 21st.*—Yesterday Barnett was elected Professor of Modern History and Literature at the Firth College. To-day he has sailed for Egypt. I shall have to provide a substitute for him next term, which is a nuisance.

I think I shall go to Swansea through Manchester. I want to see Roscoe and persuade him to give us a lecture or two next term.

*December 26th.* c/o F. Ash Yeo, Esq., Sketty Hall, Swansea.—My people are keeping Christmas Day to-day; yesterday could not be kept by Father, and I have come to dine with them.

I am trying to make the people here build a College—it is sorely needed.

*December 30th.*—Last night there was a children's party, and we showed them some pretty electrical experiments, which I think they enjoyed.

But I have not been able to do much work. I have thought a little of my lecture on Electric Light—*voilà tout*.

My first Geological lecture next term is 'Volcanoes,' next 'Earthquakes'; I want if possible to prepare these before returning to Sheffield.

*January 14th, 1882.*—My history—I left Esher sorrowful. I was not in a smoking carriage: the consolation of tobacco was denied me: 'Pickwick Papers' could not raise the cloud.

Green greeted me with the pleasant intelligence that W. P. Ker,<sup>2</sup> Fellow of All Souls, would most likely do our work this term—but this is not settled.

I enjoyed my stay with Mr. and Mrs. Green—they are very kind to me, and I hope you will like them when you get to

<sup>1</sup> For the Professorship of Latin, Greek, English History, and Literature.

<sup>2</sup> Professor W. P. Ker, LL.D., Professor of English Literature at the London University.

know them. Mrs. Green is very much in earnest about the ladies' Colleges. She plays the part of proctor to those who live in lodgings.

I saw Poulton yesterday morning. Then I called on Henry Smith. He has a beard like Jupiter and is intellectually one of the roundest <sup>1</sup> men in England.

Then I went to Clifton and had the good luck to find him in Oxford. I had a long talk with him about things in general and stayed to lunch. Just got away in time to arrive here at eight: dined: went down to the College to see about things: and here I am.

I am again asked to meet Mundella on the 30th instant. I trust he will be well enough this time.

*January 22nd.*—On Friday night I gave my Geology lecture. There was a fairly good audience, about sixty. But admission was free, they will not all take tickets for the course. It was a good lecture I think—one of the best I have given, and the people seemed interested, though once or twice I caught an expression on the face of some which meant they did not understand.

*January 26th.*—Lectures in the morning—in the afternoon I had to go to Ker's lecture, the first, and then at five gave one of my own. At six I hurried up here in time to get dressed to dine with Mrs. Mark Firth at seven.

Ker's lecture was very good indeed, there were between sixty and seventy people there, and I think there is promise of a most successful course. It is on the early period and Chaucer. Yesterday he gave a general review of the twelfth and thirteenth centuries—historical and literary. Spoke of the ideal chivalry illustrated by Roland (Song of Roland). Also of the wandering minstrels who used to go about telling stories little to credit of monk and friar, such as are handed down in Reynard the Fox.)

Last night I spoke to Mrs. Mark Firth about the good time coming for me after July. She quite approved of our idea of going on the Yorkshire Moors rather than on the Continent.

Am I lazy? But I quite feel that I had rather rest there than be compelled to *move* and *move* from one place to another.

*February 1st, 1882.*—I came back from Grenoside on Monday morning—then spent most of the morning talking to Sir Philip Cunliffe Owen, of South Kensington Museum, about the prospect of getting help here from the City and Guilds.

On Monday evening I dined at the Coles'. A male dinner party principally of School Board people. Mr. Mundella was there and I was introduced to him. He was good enough to say he had heard of me from Percival and Roscoe. At eight o'clock there was the distribution of Scholarship Certificates to the

<sup>1</sup> *Totus teres atque rotundus.*

successful children of the Central School. It was an enormous meeting in the Albert Hall, three thousand people I should think. Mr. Mundella's speech [on the English educational system] was good—solid rather than brilliant. I seconded a vote of thanks proposed by the Mayor.

Last night I dined at Mr. Mappin's, where Mr. Mundella is staying. Again a male party. Mr. Mundella asked me to sit next to him, and I had a good deal of talk on education, especially in Sheffield, and various other matters.

Arnold Toynbee is going to lecture here on Saturday night. Subject: 'Wages and Natural Law.' It is one of the popular lectures—twopence admission. I hope it will be full—I am told Political Economy draws people together in Sheffield.

I dine with Mr. Broomhead to-morrow night. I have been going out too much this week. It affects my work, especially talking to three thousand makes my class next day appear small.

I think I did fairly well, and many people looked at me as though I seem young to speak—shall I say a Daniel? All the others had grey hair.

This week has helped me somewhat here, I think; and, further, it has helped me in other ways. It has shewn me that I can have a certain amount of influence with men high in authority. The timidity which I used to feel in meeting such when I was in an undefined position at Oxford has vanished. Security of position is the best guarantee of good manners.

Toynbee lectured last night. Audience not so good as usual. Political Economy not so taking as Science apparently.

*February 9th.*—I am afraid I shall not have much of a holiday at Easter—there will be a great deal of organisation necessary here for next Session. I want to persuade the City Guilds to give us money. I sent up a petition to them by Mundella.

*February 12th.*—Avoid self-distrust. A man should not have a low estimate of himself as a worker, a doer of whatever has to be done. No one is a great worker who does not respect his own capacity.

In regard to the Guilds I do not know more than I have said. It is indefinite and vague, but I have some hopes. My fear is that they may intend to do all they will do for Technical Education in connection with their new college at South Kensington and leave the provinces to take care of themselves. This is a favourable time for the request. They are afraid the present Government may interfere with the free play of their knives and forks.

*February 12th.*—I have just returned from chapel, followed by supper with Mr. J. D. Leader, one of the editors of the *Independent*, the great Liberal paper here, that abuses the



*Sheffield Daily Telegraph*, abuse amply repaid by its Conservative contemporary. His daughter is one of our students. She passed the London Matriculation last month.

*February 14th.*—Yesterday I was very much occupied, my Optical Bank [an instrument for demonstrating the principles of the transference of light] came from Elliott's, and I was nearly all day putting it right. I am going to exhibit it at the Literary and Philosophical Conversazione on Thursday. It is Firth's gift to the College. In the evening I had work from five to nine, and I felt very healthily tired at the end.

To night I have to go to the Mayor's Ball. I cherish the hope that Uncle Alfred may be detained at Leeds and still turn up. Before the Ball I am going to see Mr. Jessop.<sup>1</sup> I do wish he could be persuaded to found a Professorship at the College, it would ease burdened finance enormously. You must think me an awful schemer. I am always thinking of how much I can get out of people! There is another rich man here, the great book-maker, worth half a million I daresay. Perhaps he might found a Professorship of Mathematics as dealing with Probability. They say great sinners found hospitals: why not a great betting man a Chair?

Ker came to-day as usual; he lives in this house and we have meals together. He is capital company and I am glad to have him.

*February 19th.* Grenoside, near Sheffield.—Yesterday I could not find a minute even to get lunch. I had two lectures in the morning; then from one to two an hour to put apparatus in order for my class of the afternoon which lasts from two to four. Then I had to hurry off to catch the four-thirty train which brought me here. Mrs. Howard was kind enough to send me a letter asking me to spend Saturday to Monday here, an invitation which I was glad to accept; and I am glad I did so, for to-day is a most lovely day without a cloud in the sky, and much better passed here than in Sheffield. We are going down to Ecclesfield Church, and I anticipate a pleasant walk. Breakfast was at nine and I actually was energetic enough to take a walk before it.

On Thursday I spent the whole day in getting ready apparatus for the Conversazione of the Literary and Philosophical Society. It was a successful meeting and there were about eight hundred or nine hundred people present—well enough amused. The chief point of the Exhibition was books, etc. There was a book with Rabelais' autograph and marginal notes by him. I busied myself chiefly with electricity. I had hired from E. Patterson (London) a little electromotor about three inches long cylindrically and one-and-a-half inches in diameter, which I caused to turn

<sup>1</sup> Mr. Jessop was said to be a millionaire.



a sewing machine. This was a very successful exhibit, and drew great quantities of interested lady spectators.

The H.'s artist friend, Mr. —, is gone. His sight is fading, a dreadful loss for an artist. It is worse than a deaf Beethoven, for he still could make Sonatas.

*February 21st.*—When I am tired I cannot write. I am horribly stiff in the arms to-day—rheumatism.

*February 23rd.*—On Tuesday afternoon I called on Mrs. Firth, and found that I had just followed on a meeting of women in regard to the enfranchisement of their sex. There is a stir about here, and there is to be next Monday a great demonstration, Viscountess Harberton in the chair. There have been lately a great many preparatory meetings to confirm the doubters and make converts to the cause.

I think they are logical, but logic goes for nothing in England : John Bull does not care about it ; rather prefers to be illogical.

To-night at the Literary and Philosophical Society (Natural Science Section) I am going to exhibit a goniometer and spectro-scope. I think I told you that the Optical Bank Firth is presenting to the College has come. I have been busy examining it to see that all is right—work by no means small since it is a big piece of apparatus with many uses.

I think the House of Commons has got in a mess about Mr. Bradlaugh, and I think Gladstone justified in not proposing any remedy last night. They refused to follow him in the matter at the beginning of the Session, and deserve to be left to their own devices.

*February 28th.*—Sheffield is as I left it—muggy and wet. You know that we have a good many School Board teachers at the Firth College. Three of them are candidates for an Inspectorship that is vacant, and I have been writing testimonials. I hope one of them will get it, and I think it very likely. I shall do all I can to influence my friends on the School Board. I have no hesitation in doing so, because the men we send in are really good.

*March 5th.*—My Geology lecture in the evening yesterday was very interesting to me. It was a difficult subject—Theories of Geological Climate. According to some this depends a good deal on astronomical causes. So I had to explain to the class the nature of the earth's orbit, the seasons as determined by the Precession of the Equinoxes ; I hope they understood. I think I put it clearly. But I was tired after it.

Yesterday I was very much occupied. Before going to College I had to visit the carpenter who is making some apparatus for me. I had two lectures in the morning, my class in the afternoon which kept me from 2 to 5, and in the evening Carnelly's lecture on Colliery Explosions from 7-9.30. After that I had to entertain the Chess Club, who met in my rooms.

Carnelly's lecture was illustrated by some brilliant experiments; the lecture was excellent and there was a very large audience, mainly men. I think I have not seen the Hall so full before.

Next Thursday Lord Reay is coming to distribute prizes at the Girl's High School.

I am very glad to be able to tell you (privately) that we have good news from the City Guilds, and most probably we shall get a grant.<sup>1</sup>

To-night I am going to supper with Mr. Whitmell. I hope Firth and his wife will be there. I have been most of the day looking over Examination papers (Lancastrian Board School Scholarship papers<sup>2</sup>), and I am tired of them.

*March 9th.*—I have not found time to write all day.

This morning I went visiting the electricians of the town to see what they can do for my lecture. I think very likely I can borrow a Brush Lamp.

This afternoon I went over Mr. H. J. Wilson's<sup>3</sup> works. He takes the leavings of other works—lead leavings, old crucibles, etc.—and extracts lead and silver and gold and platinum from them. It is a pleasant work to go over. There is so little waste.

I shall be very busy to-morrow with my Geology lecture, which is not at all ready.

This evening I have been to the meeting at the High School; Lord Reay spoke very well indeed.

*March 19th.*—I am down here [Firth College] to try over a lot of experiments for Saturday week. Booth is filling the battery and I have five minutes to spare.

I am living just at present in rather a whirl. Lighting up the College is an undertaking, and (Sir) Philip Magnus coming here on Monday is another interruption to the even tenor of professional life. That is all nonsense, it is not 'even' at all. And now to some experiments.

*March 26th.*—It is a lovely Sunday morning. I did not go to Chapel—tired after my lecture—that is my excuse.

The lecture last night was successful, I think. There was an enormous audience—a large number were obliged to stand;

<sup>1</sup> See letter February 1, 1882. As a result of this appeal to the City Guilds, Mr. Mundella attended by invitation a meeting of the Council of the City and Guilds Institute on March 6, 1883, and in response a grant of £300 a year for five years was made by the City and Guilds Institute to Firth College for the salary of a Professor of Engineering.

<sup>2</sup> The Foundation Fund of the Lancastrian Scholarships (£6540) was derived from the sale by the School Board in 1881 of the buildings of the two Day Schools established soon after the visit of Joseph Lancaster, founder of the British and Foreign Society (see Chap. III.), who gave a lecture on his new system of teaching in Sheffield in 1809.

<sup>3</sup> Member for the Holmfirth division of Yorkshire, Died 1912.

and the experiments were very successful, not one, I think, failed. But the result was very nearly not achieved, for just before the lecture the old engine we were employing on the other side of the road, broke down. Fancy my state of mind and the state of mind of Harrison of the Hammond Company. However, it was put right in the course of half an hour, and the light was all the more appreciated for the initial absence of it. We had arc lights and incandescent lights, and they were exceedingly beautiful, especially the last. On the whole the lecture was a good thing for Firth College and for me. Mr. Earnshaw took the chair, Mr. and Mrs. Roberts of the Towers came, and the audience was to some extent like a Royal Institution one—fashionable.

I don't care, as you will know, much for these things in themselves—but as an indication of an interest in the College that has to be re-started and raised, as it were, from the dead, they are valuable.

*March 29th.* Oxford.—I was called away from Sheffield yesterday to attend the funeral of Professor T. H. Green here to-day. His death is a great blow to me. I only heard of it yesterday morning, not having seen the London papers. It was quite sudden—I did not even know he was ill. There is no one who knew him who will not feel his loss acutely. He was wholly honest, and it always did one good to be with him. His place in Oxford cannot to my mind be filled by anyone else. He was really Liberal in his views—most people here only pretend to be so.

*March 30th.* Oxford.—The funeral was very sad, I have been greatly grieved.

*April 9th.* Swansea.—I am very much obliged for the extracts from 'Early Man.' They are just what I wanted, it will relieve me from the necessity of going through the book next week.

It was a pleasant party at the Hartlands<sup>1</sup> last night. Nutt, the son of David Nutt the publisher, is staying with them, and a Mr. and Mrs. Chapman Woods were of the party. Woods is a solicitor in Swansea who has written poems that have been favourably reviewed. He spoke ill of Lewis Morris's 'Epic of Hades'—thought the moralising he puts at the end of his stories slow—and that they are nineteenth-century morals spoken by people of very different nature from a nineteenth-century nature.

Penmôrlan is here. He is very much interested in dynamo machines and arc lamps, and is chattering a hundred and eighty words a minute in my ear. He is very well and looks fat and strong. Father had a better night last night.

<sup>1</sup> Sidney E. Hartland, author of *English Fairy and other Folk Tales*, 1890; *The Science of Fairy Tales*, 1890; *Legend of Perseus*, 1894.

I anticipate a pleasant term at Sheffield, for I am going to do some very interesting electrical work of my own, I hope.

*April 12th.*—I left my father on Monday morning *very ill*. He had passed a very bad night. I think he must be better for I have not heard since.

The College is occupied by the National Union of Elementary Teachers: and the room I usually have my classes in is not at my disposal till Friday.

Last night there was a great dinner in the Albert Hall. Mundella was there and made a very good speech; so was Mr. Lyulph Stanley, M.P., of the London School Board. I returned thanks for the visitors together with Mr. Sandford—but it was late in the evening and my remarks were few. At 10.30 brevity is the soul of wit.

I have not found my magnets ready which I ordered Booth to get ready, so my electrical experiments cannot commence at once—but I hope to begin them next week, when the crowd of teachers leaves us again in peace.

*April 16th.*—My lecture on Friday went off, I think, very well. I looked up Geikie's 'Prehistoric Europe.' He combats Dawkins' point that the Eskimo are descendants of Paleolithic man.

I think next Session I must go and give some lectures to the poor people at Brightside and Attercliffe and get them interested in many things beside the Public House and Betting.

*April 17th.*—My Geology Examination is going on and everybody is writing, writing, writing around me. I wrote home to tell them we had definitely fixed our movements so far as to decide on going away together in July or August. Heigh-ho, I am very happy, and life looks holiday like.

*April 20th.*—I am thinking of sending in to the Town Trustees an application for some land of theirs on the other side of the street from us; we shall see. It is not decided to do so; at present it is merely my suggestion.

*April 26th.*—At a meeting of the Executive Committee on Monday I brought before them the advisability of sending a petition to the Town Trustees for the land, and they agreed joyfully. This was confirmed at the Council meeting on Monday. I am on the look out for a young and well-educated Frenchman who knows German and English to come and teach modern languages here.

*April 28th.*—Last night I went to dine with Mrs. Howard at Grenoside and spent the night there. I met her nephew—George Walker, a colliery manager here, and we had common ground, for he is much interested in Technical Education, especially Mining Engineering. I hope he will give us some lectures next Session on it.

Since I returned this morning I have given a lecture on



Physics, Hygrometry, the measurement of the amount of aqueous vapour in the air.

This afternoon I am going down to the Norfolk Works (Firth's) to see a new testing machine (for finding the strength of their steel) and afterwards I am going to dine with Lewis Firth.

*May 10th, 1882.* Firth College, Sheffield.—Last night I was up at Mrs. Firth's. The assassination [in Phoenix Park] is terrible, but is not the work of the Irish nation; therefore I think the Government should persist unmoved in the course they have marked out for themselves. Anything else will be weakness. But this is only my opinion. They know more than I.

My experiments have not progressed—people are slow in making things, but mentally I am progressing in regard to things and learning from them.

*May 13th.*—Last night I had very terrible news from South Wales. My Uncle Kelly and his manager were down in his colliery during an explosion. He was so badly burnt that he died on Friday night. I know as yet only the bare fact. My Aunt's life is full of tragedy. Eleven years ago her eldest son, twelve years old, was brought home to her, dying from a horse's kick, and now this. It is terrible that one can do no more in the presence of death than offer sympathy.

*May 21st.*—I don't know how it is but I am busier this term than ever.

*June 2nd.*—I am just going to have supper. It is 10.30 o'clock, and the supper is two eggs, bread and butter and cocoa, which always sends me to sleep. As old Irving put it, 'tops are not in it' when I have drunk cocoa, especially when I have had seven or eight hours' work in the day. On Tuesday afternoon at Oxford I called on Mrs. Monier Williams and had tea with her. My old pupil Monty has changed his mind, and instead of going to the Bar has gone to St. George's Hospital—a much more sensible thing for him to do. He is at St. George's, where a good many Oxford and Cambridge men go. After leaving Merton Lea [the Monier Williams' house] I went to the Laboratory about five o'clock and found Clifton, with whom I had a long and pleasant talk. I am very fond of him, and we must certainly persuade him some time to come to Sheffield. Then at Wykeham House [Oxford], and found Leif and Poulton busy playing tennis. Mrs. Poulton and I strolled about the garden.

*June 3rd.*—What I feared last night came to pass. Cocoa sent me to sleep as it always does—like a sermon causing deep sleep to fall upon man.

Later I called on Ritchie, who is very well and happy. He is going to be married on June 24th, so he has cause to be so.

*June 7th.*—I am setting to work to get my lecture ready for to-morrow.



I have now to go and meet two of the Town Trustees in regard to our petition for a site for our laboratories. Mr. Stephenson is going with me.

*June 14th.*—I am very sorry that I cannot at present see my way to come up on Saturday. The difficulty is that the Prospectus has to be organised by Tuesday, and Kenworthy Brown is coming to stay with me on Monday, also the Matriculation Examination begins on Monday. I think I told you we have eighteen candidates, so we shall make three or four pounds by it. The Council will look upon me as a successful speculator.

This busy summer term was now made busier by house-hunting, which he had to undertake alone. He finally chose a house in Broomhall Place, a pleasant by-street with space and trees about it, on the fringe of the residential quarter of Sheffield, only a mile from his work and yet but half an hour's walk from the moors. To the objection that the house was more expensive than his modest income warranted, Viriamu replied, as he was wont to do later in life, that he must not have regard only to his own personal need but also to the welfare of the College.

He wrote :

*June 14th.*—I have found the house that will I think suit us and that I hope you will like as much as I do. . . . I am going to take it on lease for three years.

Living here will make a slight difference in expense. I have felt that considering my position here it would be a mistake not to have at any rate a decent house, and if you see the smaller houses, as you will bye and bye, you will commend me for not going in for a cheese-paring economy, but knowing when it was wise to spend a little extra.

*June 18th.*—With regard to the one servant, I am quite content if we find it enough. It is quite right to be economical, but it is false economy not to be comfortable. Upon my work during the next few years our future income depends. If it is thoroughly good we shall never need money. And I trust, as is the case with other men, my income will increase.

Our arrangements for next Session are progressing favourably and I hope to get the Prospectus out by the end of the month, and then for freedom!

My last lecture was given yesterday. This week there are the Examinations.

*June 24th.*—I had bad news from home last night. Father is

very ill ; I had a telegram at two o'clock to-day saying that my father is worse and that Dr. Griffiths has given up all hope. I shall arrive in Swansea by midnight. I fear the illness may prove fatal. It will be a great blow to us all. My being called away upsets things much at the College—I may have to be back there by Tuesday, if it is possible for me to get away from home.

I had a post-card this morning saying Father had slept : there was after a letter telling me that one of his lungs was slightly congested.

*June 25th.*—I arrived here late last night at midnight. But I was too late, my father died at eight o'clock. It is terribly sudden, and my absence at the last is bitter to bear. Brynmôr, Irvonwy, and cousin Morlais and I travelled by the same train last night. I do not realise at all that he is no longer with us. I saw what remains last night and this morning—it is very beautiful in my eyes. His end was calm and, we think, without pain. The funeral will be very simple. That was his wish, and anyone who desires it may follow him to the grave.

I have a good part of the day to make up a report for the Council.

*June 26th.*—The meetings next week at the Firth College have been postponed ; I wanted them to go on in my absence, but they have felt they couldn't be held, or perhaps they feel that it was not right to have them.

It is arranged that the funeral should be on Friday.

What is left of him who loved us more than is given to most children to experience will be carried to the Chapel, then to Swansea Cemetery. His request was that his body should be buried there in the windiest, highest part overlooking the Swansea Bay.

*June 27th.*—I have had no time to think of anything but our great loss, and College matters, which claimed my attention on Sunday. It is well at such times to have one's attention claimed by other things ; only one cannot pay them the attention they need. They seem small in comparison with the other grave thoughts which fill one's mind.

I have looked several times at the well-known face, beautiful in its repose—and I understand something of the desire to preserve the remains of the dead embalmed, more lovely than any statue.

*June 28th.*—It is a beautiful day, and it is hard to realise that my father no longer takes pleasure in the beauties that were to him so much of sea and sky and air. At a time like this, great questions force themselves on one's attention. Does my father live ? We can look at the body still beautiful, but *he* is not that. And yet neither is the candle flame what is left when it is blown out, but it does not live on. We may look

at one side of the great question and look at the other—we are met by what seems an impenetrable barrier—without accepting guidance, yielding ourselves to authority, we cannot get to the other side, or through it any part of the way. And it makes one bow one's head in acquiescence to what has been told us by those who have loved us and gone before. And yet that principle exaggerated may prevent progress towards the truth—and so thought swings from side to side and we are helpless. There is beauty and comfort in the religion of Christ, could one accept it like a little child, and lean on Him, and learn that His yoke is easy and His burden light, since He takes upon Himself our sorrows, and comforts us by declaring we may meet again those whom we love and who have left us as it seems for ever.

And yet I am in the dark.

I shall probably have to go to Sheffield on Monday or Tuesday.

*July 12th.*—I am very anxious that you should become well and strong. Nothing is more important than health. Wealth in comparison is insignificant.

To-day I went down to the College at 10.30, and found a pile of letters awaiting me.

This afternoon there has been a meeting of the Council, at which the Report of the Principal was read and the Prospectus for next Session was discussed. Some discussion took place relative to the City and Guilds Institute. As is usual with discussions, nothing resulted. Committees cannot do much. I must take the thing in hand myself. Otherwise the meeting was satisfactory.

Arnold Toynbee came over from Bradford where he has been staying. He is our new Oxford Member of Council. He is staying to-night at Mr. Stephenson's, and I shall meet him at dinner. After the meeting he went with Mr. Stephenson to inspect his type foundry. I could not go, having some correspondence to get through.

*July 13th.*—Yesterday, being in town and the weather being exceptionally fine, I thought I would catch the 4.30 train to Grenoside. And I stayed to dinner with Mrs. Howard, returning by the 10.30 train, and did not get here until eleven o'clock. Mrs. Howard asked about our marriage, and expressed her regret that we had been obliged to put it off.<sup>1</sup> She thought that I needed you all the more now, which is true.

It is raining very badly. Mrs. Lister has just been in, asking me what I will have for dinner. 'Beefsteak pie and bread and butter pudding' I desperately reply. 'What a wet day again,' says Mrs. Lister, 'a bad summer, not any really 'ot weather, not what I really call 'ot.' And I acquiesce.

<sup>1</sup> On account of his father's death, in deference to the wish of certain members of his family.

I cannot get to town on Saturday, nor till the middle of next week. There seems so much to be done. But I am not sure yet, and hope for something better.

*July 17th.*—I should have written yesterday from Grenoside, but I was ill most of the day, deaf in one ear, with eyes and head aching. I suppose I must have caught a cold.

*July 19th.*—To-day was to have been so different. [It was to have been his wedding-day.] I cannot allow it to pass without writing. I had a bright, incisive and energetic letter from Annie this morning. She wants us to spend August with her and Brynmôr at Llandrindod and the district round. Also to spend a great deal of next week with her.

To-morrow I breakfast with Ruskin.

Viriamu always spoke with great pleasure and enjoyment of this meeting. He remembered with amusement how some one asked Ruskin his opinion on the system of compulsory national elementary education, and in reply, Ruskin vehemently condemning the instruction of children in the three R's—'Let no one be taught reading till he is sixteen, and then only if he display a talent for it.'

*August 10th.*—I have not heard from Allinson about the floors. I am like Hamlet 'most abominably served.' It will be better for us to take a fortnight by ourselves before going to Llandrindod.

Viriamu Jones was married at the Unitarian Chapel at Rosslyn Hill, Hampstead, on August 18, 1882; only one or two members of the respective families were present. After a few days he and his wife went to Llandrindod, being asked to join other members of the family and be with his sister, Mrs. Maine (now Mrs. Home), to whom her father's death was a heavy blow.

In September they returned to Sheffield, there to enjoy the happiness of the welcome given to his wife in this town of his adoption where he was honoured as a fellow-citizen and friend. He never forgot the affection that surrounded him in Sheffield.

But leisure was not among the blessings of the home in Broomhall Place. Besides lecturing usually three nights a week on Mathematics, Physics, and Geology, which he undertook to teach when he became Principal, Viriamu

Jones also gave popular lectures on electricity to the artisans of Sheffield ; and though it used to be said that no one could be admitted to the social life of Sheffield who had not been a Sheffielder for three generations, they often dined out three times a week with hospitable friends.

It is difficult to suggest his radiant personality at this time, and he looked much younger than his years.

Lady Stephenson, whose friendship, like her husband's, was a valued privilege enjoyed by Viriamu Jones not only at Sheffield but for many years afterwards, recalls an evening in which he was dining with them, the other guests being Mr. Earnshaw and an aunt of Sir Henry Stephenson's. Mr. Earnshaw and Viriamu Jones held different views on some abstruse subject, and argued the point with some vigour. In the drawing-room afterwards the aunt, Miss Stephenson, observed : ' I do admire the way in which Mr. Jones spoke ; he held his own, but with such charming deference due from a very young man to an old and highly gifted one.'

This gift of quick sympathy and courtesy it was that enabled him to win his way in Sheffield among people of all ages and of most different temperaments, and that stood him, there as elsewhere, in the stead of age and experience.

He was called to London to see Dr. Sorby in connection with the proposed Technical Department, and wrote on May 14 :

I had rather a tiring day yesterday rushing about. I went to Lewisham and reached Chapel in time to hear Morlais' sermon. Dined with him and went to Greenhithe, where I found the *Glimpse* anchored, and cried with a loud voice ' *Glimpse*, ahoy ! ' I was heard, and Dr. Sorby and two of his men rowed ashore for me. The *Glimpse* is a beautiful little yacht, 35 tons, clean as a Dutch table, everything beautifully arranged and of the neatest. More of it when we meet to-morrow evening at nine o'clock.

Three weeks later Dr. Sorby wrote :

The success of our scheme is most surprising and gratifying. I much wish it had all happened at the time when I am in Sheffield.



To do all that I should like would involve much more than a day, and I strongly object to leaving the yacht at the best and most interesting part of the year when I can catch all the animals in the state of development. Later on, when the young animals are all more or less developed, I will gladly run down to Sheffield.

Other important men found time to make suggestions and write encouraging letters in support of the technical scheme.

It was shortly after this the arbitrators, to whom was entrusted the decision as to the site of the proposed University College for South Wales, decided on Cardiff. A principal was wanted and applications were invited.

Though he foresaw the difficulties, was much in need of rest, and was advised not yet to leave the task to which he had set his hand, even to work in Wales, Viriamu Jones decided to apply for the post.

To a Welshman who loved his country her claim was paramount.

In his speech at the opening of the Session in 1881 at Firth College, Viriamu Jones, reviewing the great educational movement from which the older universities were drawing new life and through which colleges were springing up throughout England, said: 'Wales has felt it too, and the recent Report of the Committee of the Privy Council is such as to make one expect a great advance in intermediate and higher education in the Principality.' Two months later he wrote that he had tried to persuade people in Swansea to establish a University College there. He knew how meagre in comparison with those of England were the educational resources of Wales.

He wrote to his wife on May 30 from Sheffield :

I have decided to go in for Cardiff and have just sent off an application. The formal one is to follow to-morrow.

I had on Monday morning a most successful interview with Mr. Mappin, and I have great hopes of the future of this place. I saw Mundella in the afternoon. He promised to do all he could to get Firth College a royal charter when we want it.

On Monday at 4.45 I started for Oxford, got there 6.3 : saw Percival, who was very kind and encouraging, and thought if I

desired to work in Wales I was right in going. Came on here early yesterday morning and have been working ever since.

If they elect me at Cardiff, it will be a worrying summer.

May 31. Sheffield.—Your letter was admirably reasoned. Newnham<sup>1</sup> is retiring into the background as unnecessary.

I grudge this additional day, but you could hardly do otherwise than for the party at Hampstead.

Again, on June 5 :

I shall arrive in Hampstead<sup>2</sup> about 1.15 on Saturday, and then go on to the Physical Society.

I am chosen one of six candidates, and go to Cardiff<sup>3</sup> on Monday week.

And on June 7 :

I am better to-day and your letter has been a tonic.

My strongest opponent is a Senior Wrangler and Fellow of Trinity. Nevertheless I *believe* I shall win. When I see the genuine regret in the people here whom I have told, I feel very doubtful whether I am wise to wish to leave.

Even in March one of his oldest friends had counselled him :

As to the Cardiff Principalship, I think you will do wisely in not having anything to do with it. First, I think you will not have much chance of getting it. Next, there will be a period of uncertainty and confusion such as there was at Firth College and many other places, then a crisis and the making of some one a scapegoat : probably the Principal.

Your chance of getting made second Principal will be good enough I should think. I have little doubt some much older man will *now* be appointed.

Next—an unsuccessful application will damage your position at Sheffield. It will no doubt leak out. If you determine to try I think no doubt your chances are good. Take a complete rest for a few days.

The generous welcome which Viriamu Jones received on his appointment at Sheffield, and which was renewed

<sup>1</sup> An allusion to a serious proposition that his wife should have a year at Newnham.

<sup>2</sup> In Hampstead, as he heard from his wife, who was visiting her mother, some Welsh people, who knew Swansea well, reported : ' You, and you only, are spoken of in connection with the post at Cardiff.'

<sup>3</sup> He was appointed to the post of Principal at Cardiff in 1883.

a year later when his wife joined him, the friendship lavished upon them both, made it very difficult to leave, and only nine months after they had made their home there. For years afterwards he retained his connection with Sheffield, representing the University of Oxford on the Council of Firth College ; and, though he had lived there for less than two years, even on his last visit in 1893 both enjoyed the same undiminished affection. As his wife went to make her farewell calls in the summer of 1883, once at least she was bitterly upbraided : ‘ If he wanted more money, why didn’t he say so ? We would have given him everything he wished for if only he would have stayed.’

The sudden sense that to such friends as these Viriamu Jones’s decision must seem ingratitude was overpowering. It was idle to explain that, as a Welshman, he felt he must work for his own country, that such patriotism as was then but little recognised by Englishmen impelled him to leave his friends and the work he loved.

During the two years he had been at Firth College the number of students had largely increased, for the fees had more than doubled. The proposed Technical Department, towards which the City and Guilds Institute had been induced to found a Chair of Mechanical Engineering, and the incorporation of the Medical School were bound to extend its influence yet farther. How far this was looked on as his work may be judged from the words of Mr. J. T. Moss, then Chairman of the School Board at Sheffield and a member of the Council of Firth College, who said :

He has made his presence and work here so essential to the best interests of higher education, to the College and the town, that we cannot well contemplate the calamity even of the possibility of his removal. At the outset he had to face difficulties and discouragements which would have disheartened a less hopeful and determined man. He is characterised by rare tact and judgment, coupled with unbounded zeal and great force of character. He has the faculty of imbuing others with his own enthusiasm. Under his management the College has developed new departments of usefulness. He has just brought to a satisfactory point the absorption by the College of the Sheffield Medical School, and in this, as well as in many other

matters, he has shown a power of dealing with matters of business under trying and delicate conditions, such as is possessed by few men of any age. He enjoys the fullest confidence and respect of the Council. It is a real pleasure to work with him; his students are delighted to work for him.

Sir Henry (then Mr.) Stephenson, the Vice-President, and Dr. H. Clifton Sorby, the President, of Firth College, gave similar testimony.

Sir Philip Magnus<sup>1</sup> ascribes the foundation of the technical or engineering departments at Sheffield in great measure to the energy, importunity, and foresight of Viriamu Jones. In 1882 he asked Sir Philip Magnus to urge the Institute to help him to set up an engineering college at Sheffield. Sir Philip induced Mr. Mundella, then Vice-President of the Council and member for Sheffield, to lay the scheme before the Council of the Institute, which in March 1883 granted a subscription of £300 for five years towards the salary of a Professor of Engineering provided that the city manufacturers would furnish funds for the installation and upkeep of the plant. Three citizens—Sir Henry Stephenson, Sir Frederick Mappin, and Dr. Clifton Sorby—came forward to help the Principal, and in 1884 the Sheffield Technical School was established as a department of Firth College. At the formal opening in February 1886, Sir Frederick Bramwell, Chairman of the Executive Committee of the Institute, presided, and Sir Philip Magnus delivered the inaugural address before many of the leading manufacturers of Sheffield. In the evening Sir Frederick Bramwell spoke to a large gathering of artisans and students on the value of technical instruction. The Archbishop of York and Professor Henry Roscoe also addressed the meeting.

In the course of a few years Sheffield introduced a new system of metallurgical education, in which the ordinary scientific laboratory equipment is supplemented by a working plant on manufacturing lines, able to cast steel

<sup>1</sup> Organising Director and Secretary of the City and Guilds of London Institute and Viriamu's rival applicant for this post in 1881. He afterwards helped the former in his efforts to create the Technical Departments in Wales also.



about one-tenth<sup>1</sup> of the commercial size.<sup>1</sup> In 1890, the local technical authorities decided to erect a small steel works, and twelve years later Sir Frederick Mappin and the Committee determined to establish experimental works of the same kind which should be second to none the world over. Thus there is now in Sheffield the greatest armoury as well as the most important cutlery centre the world has ever seen; yet in the early 'seventies a scantily furnished chemical laboratory, having one chemist and perhaps an assistant and a boy, formed the scientific equipment of the most up-to-date works. To-day most Sheffield firms have a fine chemical laboratory with a competent staff, and, in addition, scientific appliances for static shock and dynamic mechanical testing.

The charm of his sunny, joyous temperament struck those who knew Viriamu at this time even more than his intellectual gifts. Mrs. Woodhouse, who first met him at Sheffield, says that his smile and greeting seemed 'the rarest combination of sweetness with power that I can recall. . . .'

His friend, Clement Templeton,<sup>2</sup> who worked with him later at Cardiff, writes :

Of my old friend's many attractive qualities those most vividly impressed upon me were his delightfully boyish freshness and simplicity. One always felt at ease with him, quite as much in a serious discussion on some social or political question as when playing a game of word-building—into either of which he would enter with equal zest.

Some of the 'spade work' done at Firth College is described by his Oxford friend and Sheffield fellow-worker, P. A. Barnett :

Together with the other few members of the staff we had uphill work to do. Students came to us for the most part very

<sup>1</sup> To make the distinction clear, the largest cast ever made under exact manufacturing conditions in the Siemens furnace in the University steel works weighed only 2 tons 7 cwt. A commercial scale, on the other hand, involves a large output and large plant to minimise cost of production, and a very common size of cast made in a commercial Siemens furnace is 25 tons, while 40- and 60-ton casts are not uncommon.

<sup>2</sup> Clement Templeton was afterwards Lecturer in Music at the University College, Cardiff, 1883-85.



badly prepared; and our premises, though designed generously considering the kind of work that had preceded the new development, soon showed themselves inconveniently small for what we wanted to do. It is fair to the institution to say that many of the students of those days have achieved notable distinction.

We soon set out to try to collect funds for development, but we did not at first succeed very well. The founding of the College had been a great effort, though the main part of the funds had been provided by Mr. Mark Firth and a few friends. It was not easy to convince those who could give that some further provision was needed. My own complaint was that I was running out of my English, and could do neither English nor Classics unless I had time to read as well as lecture. We played lawn-tennis, dined out a great deal in a missionary spirit, and when I myself even took to hunting, it was partly in order to cultivate the acquaintance of people who might help us. 'J.V.' instigated me further to take the world into our confidence in a solemn magazine article, and somewhere in a 'Macmillan' of the early 'eighties is the resulting record for our contemporaries, and our appeal to posterity. We had some curious joint experiences. I remember one good old gentleman—now gone to his rest—who said to the two of us when we met him out at dinner, or, rather, spreading coat-tails to the drawing-room fire, that he was one of those who couldn't see any good in Latin and Greek, to which I replied that there were indeed such people. 'J.V.' reproved me afterwards for irreverence to old age and an indiscreet observation, but admitted later that it was all that could be said and difficult not to say it.

He was the first who gave me any idea that people could be trained to teach. He came to one of my early lectures, and at my request bestowed some criticisms upon the performance for which I have never ceased to be grateful. He was an acute and accurate observer, and himself never doubted, as I knew well in after days, how necessary a discipline in the teacher's art is supplied by systematic criticism.

I have, moreover, very clear and very delightful recollections of the councils of war and the 'At Homes' in which I assisted as a trusted A.D.C. after his marriage. We were all then young and very active and hopeful.

When things were beginning to move, Wales called, and Viriamu Jones offered his services to Cardiff. He saw an opportunity, abundantly realised afterwards, though at the price of his life, of establishing in the chief city of South Wales a great centre of learning, or, at any rate, of educational activity. He left his Sheffield work in the untiring hands of William Hicks, who carried it to a triumphant conclusion.

On June 20, 1883, Mr. Mundella sent a letter of regret and congratulation :

I congratulate you with sorrow. I rejoice at *your success* and grieve for Sheffield's loss. I have told all my Welsh friends that it is hardly a grateful return for what I have done.

I hope and believe you are entering a brilliant and successful career. There is much *hard work* before you, but for a Welshman and lover of education I can conceive no work much more congenial than yours will be.

## CHAPTER III

### SCHOOLS IN WALES BEFORE 1883

A hard beginning makth a good ending.—*John Heywood.*

VIRIAMU JONES' work in Wales cannot be fully understood without some knowledge of that of his forerunners.

In the seventeenth and eighteenth centuries three successive efforts were made for the education of the Welsh people by three clergymen of the Church of England—Thomas Gouge, Griffith Jones, and Thomas Charles.

In 1674 Thomas Gouge, son of a learned English divine and educated at Eton and Cambridge, determined to devote his energies and fortune to the education of the poor in Wales, because there, he judged, 'was most occasion for it.'<sup>1</sup> With Dr. Tillotson (afterwards Archbishop of Canterbury), Dr. Stillingfleet, and Richard Baxter he founded a society to promote the instruction of poor Welsh children in the English language, also the circulation of the Book of Common Prayer and other religious publications in the Welsh language;<sup>2</sup> and as but thirty-two Welsh Bibles<sup>3</sup> could be found in Wales and London, his first care was to arrange for a new edition of 8000 Welsh Bibles and copies of the Liturgy.<sup>4</sup> He laboured unceasingly till his death, travelling up and down Wales at his own

<sup>1</sup> *The University of Wales and its Constituent Colleges*, by W. Cadwaladr Davies and W. Lewis Jones, M.A., chap. iv. p. 40.

<sup>2</sup> *The Welsh People*, by Rhys and Brynmôr Jones, chap. xi. p. 480. For a comprehensive account of the religious and educational movements in Wales, see chaps. x. and xi.

<sup>3</sup> See note, p. 102.

<sup>4</sup> *The University of Wales and its Constituent Colleges*, by W. Cadwaladr Davies and W. Lewis Jones, M.A., chap. iv. p. 40.

charge twice a year.<sup>1</sup> But after his death the work declined, and in twenty years the Trust had lapsed and the schools had vanished.

In 1730 Griffith Jones, Vicar of Llanddowro, Carmarthenshire, revived a system of circulating schools differing from those of Gouge in that they were for 'illiterate adults as well as children, and the medium of instruction was not the English but the Welsh language.' These schools were only carried on for a short time each year at one place, and the manner of instruction was chiefly catechetical. In many of them two-thirds of the pupils were adult men and women, and to those whose days were full the masters gave their evenings.<sup>2</sup>

Begun in his own parish, his work gradually spread throughout the whole of Wales :<sup>3</sup> in the year 1739 there were seventy-one circulating schools with nearly 4000 scholars. When he died in 1761 there were 218 schools; the number of persons taught to read in a single year amounted to 10,000, and, during a period of twenty-four years, 150,000 persons, varying between the ages of six and seventy, had been taught to read the Bible in their mother-tongue.<sup>4</sup>

On his death, the fund for the maintenance of these schools was suspended owing to a law-suit, and the people were once more left without education. This lasted until 1785, when Thomas Charles (Charles o'r Bala), a newly ordained clergyman, struck by the ignorance of the people in his parish, and finding this ignorance almost universal, set himself to reorganise education.

Funds could be found, but no teachers ; and so Thomas Charles decided to train them by superintending the teaching of children in his own neighbourhood. He raised a fund to pay the teachers and he published catechisms and text-books for their use. They in their turn trained voluntary helpers, and before long all Wales was at her books.

<sup>1</sup> *The University of Wales and its Constituent Colleges*, by W. Cadwaladr Davies and W. Lewis Jones, M.A., chap. iv. p. 41.

<sup>2</sup> *The Welsh People*, by Rhŷs and Brynmôr Jones, chap. xi. p. 481.

<sup>3</sup> *The University of Wales and its Constituent Colleges*, by W. Cadwaladr Davies and W. Lewis Jones, M.A., chap. iv. p. 43.

<sup>4</sup> *Ibid.*, p. 45.

Thus in a few years Thomas Charles taught his countrymen and women how to read. The next step was the formation of a society, the forerunner of the British and Foreign Bible Society, for the publication and circulation of the Welsh Bible. The idea, it is said, was suggested to him by the following incident. Meeting a little girl in the streets of Bala, he inquired if she could repeat the text from which he had preached the day before. Instead of replying promptly as was usual, the child, weeping, told him that the bad weather had 'kept her from the Bible'; she used to walk seven miles over the hills to a friend's house to read it!

Even more striking is the well-known story of Mary Jones, who walked from Talyllyn, near Towyn, to Bala, a distance of forty miles, to see Thomas Charles about getting a Bible. Her burial-place in the graveyard of a chapel at Bryncrwg Aleth, two miles from Towyn, is still visited. It is interesting to record that an account of her life in modern Greek is issued by the British and Foreign Bible Society for circulation in Greece.

Thomas Charles's Day schools were superseded by the establishment of the Elementary schools under the Act of 1870, but his Sunday schools remained. These Sunday schools, frequented by pupils of all ages and classes and aiming at the ordered study of the Bible, were unique as organisations of a purely self-governing character. They encouraged the spirit of free inquiry, and, by their discussion of theological problems, fostered the Welsh talent for self-expression.

Splendid as were these attempts, depending upon the labour and gifts of individuals, they failed to provide continuously for the education of the Welsh people. Inquiries into the condition of the people's education were made, the first of which revealed the fact that only one child in every 1712 of the population attended school.

Lord Brougham's Commission of 1818 showed there had been little or no progress, but at that time the great continental wars had absorbed all the resources and attention of the country.



In 1832 Lord John Russell moved that a grant should be made for providing elementary education. The Report showed that one child in thirty-three went to school, but that the schools were of such a nature that the majority of the children left them without being able to read or write; that some were simply circulating schools in which one master possessing some sort of qualifications gave a weekly lesson, and that sometimes in the schools of the group he visited there would be but two books or one book among all the scholars.<sup>1</sup>

From 1834 to 1839 the Lords of the Treasury made an annual grant of £20,000 for purposes of elementary education in England and Wales, the administration being entrusted to two societies—the National Society founded by Andrew Bell through which the Church of England had undertaken the education of the children of the poor, and the British and Foreign Society, founded by Joseph Lancaster and maintained for the most part by the liberality of Non-conformists. There was no inspection. In 1839 the grant was raised to £30,000, ‘a small fraction of the revenue of one day,’ as Carlyle said. Lord John Russell brought forward a scheme to entrust the administration to a special committee of the Privy Council. Inspectors were also appointed in the face of the fiercest opposition from the Church.<sup>2</sup>

From 1839 onwards the grant from the Treasury

<sup>1</sup> Viriamu Jones’ speech at Merthyr, December 6, 1885: *Western Mail*, December 7, 1885.

<sup>2</sup> The Order in Council giving effect to the scheme was hotly attacked. The Conservative Churchmen, led by Stanley, opposed it on the ground that it gave over the control of education to a political body, which might bestow public money not only on dissenters, but on Roman Catholics and even infidels. The incubus of religious controversy thenceforward and to the end of the Queen’s reign and beyond it, beset the paths of English elementary education. The ministry barely held their own. In the debates of June 1839, on the Order in Council, the Government majority sank to five, and even to two, while a resolution of the Archbishop of Canterbury in the Lords denouncing the scheme was carried by 229 votes to 118. The Committee of the Council for Education was, however, constituted; but inspectors appointed to supervise the administration of the grant were to be selected with the approval of the bishops, and instructed to report to them as well as to the Council (see *History of England during the Reign of Victoria*, by Sidney Low and Lloyd C. Sanders, Vol. xii. chap. i.).

increased and the schools improved continually, but there was still much to do ; the State only supplemented local effort, and thus the needier districts were the most neglected.

In 1846 another Commission was appointed to inquire into the state of education in Wales. This inquiry extended far beyond the limits assigned to it, and so great was the offence given by the Report to Welsh Nonconformists that it was called 'Brad y Llyfrau Gleision'—'The Treason of the Blue Books.' 'Wales,' by Sir Thomas Phillips (1849),<sup>1</sup> was the protest of a patriotic Welsh Churchman against the Report of this Commission in 1847 for having 'given currency to very erroneous impressions regarding the character of the native inhabitants of the Principality.' Henry Richard, M.P., also wrote in English, and Dr. Lewis Edwards, the Rev. William Rees (Gwilym Viraethog), and the Rev. Evan Jones (Ieuan Gwynedd), in Welsh, to protest on behalf of Welsh Nonconformity.

The Commissioner for North Wales, Mr. H. V. Johnston, stated in 1847 that in his district there were 591 schools for primary instruction ; thirteen of these were in abeyance, the remaining 578 were attended by 32,023 scholars—less than 9 per cent. of the population. The number of schoolrooms set apart for instruction amounted to 274 ; the 317 additional schools were held in dissenting chapels, shops, cottage kitchens, and even bedrooms. Only 128 schools had furniture and apparatus, the remainder were destitute of forms, desks, books for reading, slates, or other material for writing and cyphering. Of 625 teachers employed, 601 received an income less than the wages of the lowest class of skilled mechanics, and many of them took to this means of livelihood because ill-health or physical deformity hindered them from manual labour.

<sup>1</sup> Sir Thomas Phillips in November 1840 sent a memorial to the Committee of Council on Education representing 'the state of ignorance and neglect of the population engaged in the colliery districts of Monmouthshire, his own wish to help to provide a school for 200 or 250 children, and asking for a grant of the public funds now at the disposal of the State, but which seemed inadequate to provide the means of sound moral and religious training in any other manner than by aiding and encouraging the erection of schools and the establishment of well-instructed and religious men as teachers.' Eventually the Committee gave a grant of half the cost of the school buildings.

By the Act of 1870 education was made compulsory, and the day of spasmodic effort was over.

Wales profited greatly from the passing of this Act ; but while the needs of elementary education were being recognised, secondary education in Wales was degenerating. Sir Thomas Phillips stated with regard to the few endowed grammar schools : <sup>1</sup>

The extensive decay of grammar schools in Wales has been brought about partly by the influence of social changes and natural causes and partly by the defective government to which they are subjected and the imperfect provision made by our law for the correction of abuses to which they are exposed.

The Endowed Schools Inquiry Commission sat in 1864-66. Many endowments were dealt with by the subsequent Endowed Schools Acts of 1868-69, and work was still going on in this direction under the Charity Commissioners when in 1880 (after two generations of schoolboy life) it was represented to the Government that, 'at the very best, the existing educational institutions, of a class above public elementary schools, are not only insufficient in number but so inconveniently situated, and in some cases so fettered by denominational restrictions, as to be at once inadequate to meet the wants of the Principality and unsuitable to the character of the population.' <sup>2</sup>

Lord Spencer appointed, in 1880, a Departmental Committee under the chairmanship of Lord Aberdare. The other members of the Committee were Henry Richard, M.P., Professor John Rhÿs, Viscount Evelyn, M.P., Prebendary Robinson, and Lewis Morris ; Mr. W. T. Warry of the Charity Commission acted as secretary.

The difficulties which have been successfully overcome by the University Colleges of Wales are recorded in the Report of that Committee, memorable alike for the thoroughness and impartiality of its inquiry and for the statesman-like and beneficent recommendations with which

<sup>1</sup> *The University of Wales and its Constituent Colleges*, by W. Cadwaladr Davies and W. Lewis Jones, M.A., chap. v. p. 57.

<sup>2</sup> Letter from Lord Spencer, then Lord President of the Council to Lord Aberdare, appointing the Commission of 1880.

it concluded its labours. For the patient and able direction of the Committee every Welshman owes a deep debt of gratitude to Lord Aberdare.

The heads of inquiry were : (1) the nature and extent of existing intermediate and higher education in Wales ; (2) the conditions favouring any particular denomination ; (3) existing deficiencies and existing endowments ; (4) the question of new contributions and their incidence ; and finally (5) ' Whether a University for Wales, with power to grant degrees (in arts) is necessary, or would tend to confer a real benefit on higher education in the Principality ? '

The secondary schools for boys in Wales were insufficient, ill-placed, ill-endowed, or, if well-endowed, ill-managed, the curriculum scanty, and the accommodation often unsuitable. For girls the provision was still more meagre. Compared with England, Wales was most poorly endowed for both charities and education ; nor had she received Government help as had both Scotland and Ireland in generous measure. The Report stated that : ' The number of endowed schools at present conducted in Wales and Monmouthshire was 27, of which 13 were in North Wales, 11 in South Wales, and 3 in Monmouthshire.' <sup>1</sup>

More than half the boys learning Greek and Natural Science belonged to the schools of Bangor, Brecon, Llandovery, and Monmouth. The numbers in attendance at these four schools together amounted to 633, considerably more than one-third of the whole number in the twenty-seven grammar schools of Wales and Monmouthshire.

David Hughes's School at Beaumaris, the first on the list of endowed schools given in the Report, had an endowment of about £900 a year over and above the income derived from fees, which were £50 for board and tuition and £6 to £8 for tuition only. It possessed no classrooms, and had for some years educated only half a dozen Anglesey boys.

Four of the schools, including one in Monmouthshire, had no playground, and the accommodation in several was most faulty. Seven schools in North Wales and five

<sup>1</sup> The Report of the Departmental Committee, p. vi.



in South Wales had begun to work under schemes drawn up by the Endowed Schools Commissioners, and schemes for other schools were under consideration.

Imperfectly equipped and organised as these schools were, their usefulness was also impaired by their unequal distribution. 'In Glamorganshire, with a population of 511,672 and containing the towns of Swansea, Cardiff, Merthyr, Aberdare, and Neath, the only public grammar schools are those of Cowbridge, Swansea, and Gelligaer,' the last having been founded recently by the Endowed Schools Commissioners.

In regard to the extent of the provision of higher education, it was found that 4036 boys were receiving instruction in the endowed grammar, proprietary, and private schools in Wales.

Only a small percentage of them appeared to be receiving a complete classical or an advanced modern and scientific education, in the private schools they were generally restricted to the ordinary subjects of an English education; in grammar and also in some private schools they learned at most the rudiments of Latin.

For the education of girls there are but three endowed schools in the whole Principality, viz., those at Denbigh and Llandaff, supported out of the funds of Howell's Charity, the gross income of which amounts to £6500, and the school at Dolgelley, created by a scheme under the Endowed Schools Acts and maintained with funds provided out of the charity of Dr. Daniel Williams and amounting to about £300 a year.

The total number of girls educated at these schools and one at Carmarthen was 'about 312.'

The Howell's School at Denbigh at the time of the Report was educating 'eighty-five scholars,' of whom twenty-five only were on the foundation, the others being boarders paying £20 per annum and day boarders paying fees which were taken to represent the cost of their education. The Howell's Charity at Llandaff provided for thirty orphans, thirty paying boarders, and forty day boarders.

In answer to inquiries it was stated that great sacrifices were made by the farmers 'to send their girls away to be educated; many girls were sent away to schools at a



distance, as to the character and efficiency of which the parents admitted they knew nothing.'

At the Howell's School at Llandaff complaints were made as to the exclusion of Nonconformists from the benefits and from the governing body of the school, and of the large expenditure compared with the numbers educated. Strong representations were made to the Committee 'as to the expediency and justice of giving a more popular and open character to the governing body and of limiting or taking away the control of the Drapers Company.' The Bishop of Llandaff, however, 'thought that there could be no better way of choosing the governing body than that now in force, and though Nonconformists might feel some distrust of the institution as being under Church influence, yet, in his opinion, if they knew the honourable and disinterested way in which it was managed they would have no reason to entertain such a feeling.' The grievance of the Nonconformists, however, is that 'fair and honourable as the management may be, its undeviating accompaniment has been the exclusion of their co-religionists from any substantial share of the benefits of the foundation.'

The Schools Inquiry Commissioners reported that 'about 16 boys in every 1000 of the population should be receiving education higher than elementary.'

Taking the population of Wales and Monmouthshire to be about 1,570,000 and reducing the estimate in consideration of the exceptional conditions of Wales from 16 to 10 per 1000, intermediate school accommodation should be provided for 15,700 boys and that number ought to be in attendance.

In contrast to this our returns shew accommodation in the public schools for less than 3000, and that accommodation is for the most part of an inferior kind, unsuitable and defective. They also show an attendance of less than 1600.

After taking into account the numbers in attendance at proprietary schools (209) and in private schools (2287) as to the efficiency of which last in respect of accommodation and instruction we have no complete information, there still remains a great and deplorable difference between the number who ought to be receiving intermediate education and the number who are in receipt of it.

The urgent necessity of providing that the schools should be

free from any sectarian or denominational character, both as to teachers and management, was insisted on by a large proportion of the witnesses and was embodied in all the sets of resolutions submitted to the Committee.<sup>1</sup>

As to educational endowments, the Committee found that in Wales these amounted to less than 4*l*.<sup>2</sup> per head, while in England they averaged 11½*l*., a ratio of not quite one to three.

Evidence was also given before the Committee as to the comparative poverty of the population throughout the country :

That the percentage of houses assessed to the House Duty in Wales is 6·6 per cent. as against 18 or 19 per cent. in England : that the value of real property in Wales again was said to be £3·9 per head of population against £5·0 in England : that county and borough assessments in Wales were £8·4 to £12 and £13 per head respectively against £15·7 and £24 per head in England.

Two notable features of the Report of this Commission are the generous recognition and full encouragement which it gives to the spirit of Welsh nationality and its appreciative testimony to the universality and vigour of Welsh Non-conformity. The Committee had worked in the spirit of Meredith's saying : ' There is human nature and Welsh nature,'<sup>3</sup> and after thirty years the kindly fruits of its labours have not all been gathered.

The Report declared that :

The first thing to be noted is that Wales has a distinct nationality of its own. The fact that Welshmen are thoroughly loyal to the Government under which they live, that they are satisfied to possess the same institutions and be governed by the same laws as Englishmen, that there is no agitation amongst them for a separate political existence, though it tends to make their nationality less obtrusive and exacting, in no way destroys its reality.

The spirit which elsewhere manifests itself in struggles against the central authority and in protests against the

<sup>1</sup> In spite of this lack of schools, it was not till 1880 that the Intermediate Education Bill was passed.

<sup>2</sup> 3·888 pence.

<sup>3</sup> *Vittoria*, chap. xxviii.

supremacy of a dominant race, is in Wales content with maintaining the continuity of the national life, preserving the traditional sentiments of the race, and fostering those ideas and usages which are distinctive and characteristic of the nation.

Certain witnesses complained of Welsh narrowness and provincialism, and urged that Welsh people should obtain education wherever possible out of Wales: that no encouragement should be given to institutions adapted to the minds of the Welsh people, and that whatever was specially characteristic of the nation should be weeded out.

The Report, however, pronounced of the existence of a Welsh nationality, 'It is in our opinion a reason for securing within the limits of Wales itself a system of intermediate and higher education in harmony with the distinctive peculiarities of the country.'

The difficulties, varying with places and individuals, which confronted Welsh boys owing to their meagre knowledge of English, were exhaustively analysed, some witnesses even asserting 'that a Welsh pupil in acquiring a grammatical knowledge of English or of Latin or Greek through English, was in the same position as a French boy.'

As regards the provision for higher education, Dr. Thomas Nicholas had written in 1863:

Among the provinces of the United Kingdom, Wales stands alone destitute of superior colleges and of the means of rewarding literary merit with University honours. . . . It is useless to complain of the backward and obscure condition of the Welsh people, while no proper efforts are made to put them on a footing of intellectual equality with their neighbours. Such condition is not traceable to poverty, to intellectual inferiority, or to any of the social or political evils which corrupt or degrade a nation. No portion of the British people is endowed with a quicker or more penetrating intellect, none is more ambitious of obtaining knowledge or more able to appreciate and use it when obtained.<sup>1</sup>

Before the Committee, the Rev. T. C. Edwards (Principal

<sup>1</sup> When the grant of £100,000 for building three new Queen's Colleges and a Queen's University was made to Ireland she already possessed the University of Dublin and the Royal Belfast Institution.

of Aberystwyth College) declared that the state of preparation of those students who came to Aberystwyth or to the theological colleges of Wales was very defective, though of late years he had noticed a slight improvement as the character of the institution and the necessity for a more thorough preliminary training became better understood. In natural science more particularly, according to the statements of some of the professors, the minds of the students on their first admission to the classes were often a blank ; it was necessary to begin with them at the very beginning. ' Much of the instruction, therefore, given in the College, though relating to higher subjects, is of a rudimentary character.'

Under such circumstances it was only dauntless effort and devotion which had achieved the foundation of the University College of Wales at Aberystwyth. In 1863 a Committee of Welshmen, who ardently desired that Wales should have a University of her own, defined their conception of a national University, drafted an appeal, worked to educate public opinion, and at one stage of the movement they invited St. David's College to join them in the establishment of an unsectarian university college in combination with that college. Differences, however, arose, and the scheme was dropped.

St. David's College, Lampeter, founded by Bishop Burgess in 1827, in the meantime obtained powers to grant the degrees of B.D. and B.A., in 1852 and 1865 respectively, and was affiliated to the Universities of Oxford and Cambridge.<sup>1</sup>

But the day of the University had not come ; the difficulties were too great. The University College of Wales was opened by the Committee at Aberystwyth in 1872 with the hope that its foundation would lead to the establishment of a University, and in this hope they remained steadfast.

The funds, not only for starting but for maintaining that College, were collected by the Committee, all Wales subscribing to its maintenance. A guarantee fund of

<sup>1</sup> *The Welsh People*, by Rhys and Brynmôr Jones, p. 489.



£2000 a year was raised. Sir Hugh Owen organised a campaign and obtained permission to attend the assemblies and the annual and district meetings of the various Nonconformist bodies of Wales. A 'University Sunday' was instituted in the years 1876, 1877, and 1878, and house-to-house collections were made by voluntary committees. Nearly £9000 was raised in the three years. Some hundred thousand persons gave sums of under 2s. 6d., about five thousand gave exactly 2s. 6d., four thousand gave sums over 2s. 6d., and after several years only seven persons had given sums of £1000 and seven persons from £500 to £1000. The quarry districts alone contributed to the fund for the University College of Aberystwyth in three years—chiefly in half-crown subscriptions and smaller sums than that—£508 4s. 4d., a fact without parallel. In 1875 the commercial travellers of North and South Wales raised nearly £4000 to found scholarships at the College, and an appeal made at the same time for a sustentation fund of £2000 for three years resulted in the collection for the first year of a sum amounting to £3000, to which at least 73,000 persons of the middle and industrial classes contributed.<sup>1</sup>

It is interesting, in this connection, to note that a few years later, when the Dean of Bangor was collecting subscriptions in North Wales, he called on a poor farmer who got up from a humble meal and, fetching a £100 note from an earthen pot, said: 'Give this to the North Welsh College!'

In view of the poverty of Wales and the disregard of her educational needs among the wealthier classes of the community, the institution of the University College at Aberystwyth was a national triumph. Its success greatly influenced the Government to give grants towards the foundation of colleges in North and South Wales. In the Report from which we have already quoted, the Committee recommended the foundation of University Colleges for South and North Wales and cited the precedents of Scotland and

<sup>1</sup> *A Sketch of the History of the [University] College [of Wales], Students' Handbook, 1909, by Principal T. F. Roberts, LL.D.*



Ireland for the grant of public funds ; the Treasury had granted £120,000 for building its new colleges to the University of Glasgow, on condition that an equal amount was raised locally, and £100,000 to Ireland for building her new Queen's College.<sup>1</sup> In the year 1881-2 the two Universities in Ireland and the Queen's Colleges received £25,338, and the Scottish Universities £18,992 for maintenance, besides £80,000 assigned to Edinburgh buildings over a period of four years. In recommending that a grant of £4000 should be made by the Treasury for the maintenance of one college in South Wales, the opinion was expressed that if State assistance were received the locality ought to raise 'contributions voluntarily or by rates.'

The Committee recommended that

the College should be altogether unsectarian and should not undertake to provide any kind of theological instruction. The principal should, in every case, be a layman. . . . Also that the advantages of the teaching staff should as far as possible be thrown open to girls and young women requiring a higher education than that given in schools.

It was further recommended that students should be admitted to the College at a much younger age than at the English Universities,<sup>2</sup> and that the Colleges should provide a course which in ordinary cases should not last beyond the twentieth year so as to take in those who, after leaving the second-grade schools, might be able to devote to higher education the interval which might elapse before they entered into the active business of life.

These are the general facts with regard to the condition of Welsh intermediate and higher education when the University College of South Wales and Monmouthshire was established in 1883. It remains to say something of the spirit underlying them, of the tendencies of thought and feeling of the Welsh people. The Welsh belong to an older civilisation than the English : they are closely related to the Irish, for the same Celtic blood flows in their veins. Before the coming of Christianity, before the Roman invasion of

<sup>1</sup> *The Welsh People*, by Rhys and Brynmôr Jones, chap. iv. p. 46.

<sup>2</sup> For fourteen years after the foundation of the Welsh University Colleges, twenty was the average age of the students on entrance.

England, the Celts of Ireland (and Wales) had already attained a high level of civilisation.

The law with them, says Mrs. Green, of the early Irish peoples was the law of the people. They never lost their trust in it. Hence they never exalted a central authority, for their law needed no such sanction. While the code was one for the whole race, the administration, on the other hand, was divided into the widest possible range of self-governing communities which were bound together in a willing federation. The forces of union were not material but spiritual, and the life of the people consisted not in its military cohesion, but in its joint spiritual inheritance.<sup>1</sup>

The Irish were never subdued by the Romans : on the other hand they were quickly won over to Christianity. And the Welsh lived in close connection with their kinsmen over the seas.

The roll of saints and scholars testifies to the close intimacy of their relations with the schools of Ireland and to their connection, through the Irish schools, with the intellectual culture of the Continent, though in the latter respect they never rivalled in direct influence the Hibernian missions. But Irish monastic learning which became so potent a factor in the spread of civilisation, owed, if not its origin, at least a great part of its inspiration and power to Welsh influences.<sup>2</sup>

In spite of centuries of harrowing wars with their more powerful neighbours, of subjugation, of humiliation and poverty, the Welsh never lost their refinement of thought and manner, their sensitive imagination, their deep interest in speculation and in every kind of knowledge. 'A Welsh woman of pure blood and therefore delicate mannered by nature,' wrote Meredith ; and again, 'He had a Cymric and Celtic respect of character, which puts aside the person's environments to face the soul.' Theirs is the heritage of an ancient culture. Nowhere is this spirit more manifest than in the Welsh educational movement and in the system it has developed. In a speech at the opening of the County school at Merthyr in January 1897, Viriamu Jones said :

It is an important time in the history of Wales, and when the historian begins to write it, I imagine he will trace the history of

<sup>1</sup> *Irish Nationality*, by Mrs. J. R. Green. Home University Library.

<sup>2</sup> *The University of Wales and its Constituent Colleges*, by W. Cadwaldr Davies and W. Lewis Jones, M.A., p. 8.

the century somewhat as follows :—‘ The religious revival of the last century and of the beginning of the present century was the awakening of national life, giving rise to a spiritual life, which had for its natural outcome the real reverence for knowledge which I venture to claim as characteristic of the Welsh people. Many and pathetic are the stories of the sacrifices made by Welsh parents to give their children the priceless gift of knowledge at a time when it was hard to acquire it, by reason of absence of educational opportunity in the Principality. This reverence for knowledge in combination with a true democratic ideal—the only democratic ideal worth anything, the ideal of a community in which everyone should be a cultivated citizen—has given rise to a passionate desire on the part of the people of Wales for a perfected educational system. The history of Wales during the last thirty years has been little else than the history of the development of this system.’

### NOTE

(See p. 87, footnote 3)

There is no trace of the use either in the early Welsh or Irish Church of a native liturgy or translation of the Bible, and, prior to 1567, no considerable portion of the Scriptures was translated into any Celtic tongue. The Celtic Churches, had, however, a special Latin version of the Bible, a revision of the *Vetus Italica*.

By an Act of Elizabeth (1562) the Welsh Bishops with the Bishop of Hereford were ordered to translate and publish the Prayer Book and the whole Bible within three years under a penalty of £40 each. William Salesbury and Bishop Richardson of St. David's were entrusted with the work, and in 1567 they published the Prayer Book and New Testament, the latter translated ‘ from the Greek and Latin,’ showing that the traditional reverence for the Vulgate had not yet been lost among the scholars of the Reformation. The popularity of this translation was, however, much hindered by a somewhat pedantic orthography, apparently due to Salesbury. Owing, it is said, to a dispute on some rendering of the Hebrew text, their work went no further, and the translation of the Old Testament was left to Dr. Morgan, Bishop successively of Llandaff and St. Asaph, who, in 1588, brought out his translation of the Old Testament and the Apocrypha with a revised text of the New Testament. In 1620, Dr. Parry, Bishop of St. Asaph, issued a revision of Morgan's translation generally conforming to the Authorised Version of 1611, but the style remained that of Morgan, and even the Revisers of 1881 found it advisable to return to Morgan's text.

Both Old and New Testament were translated from the original tongue, though Bright, Gladstone, and others have made contrary assertions. There is no question that the Bishops to whom Wales owes her Bible were thoroughly competent scholars as well as men of sound literary feeling.

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<sup>1</sup> Condensed from a note of Professor Thomas Pöwel.

## CHAPTER IV

### THE COLLEGE IN 1883

Man's abiding happiness is not in getting anything but in giving himself up to what is greater than himself, to ideas which are larger than his individual life, the idea of his country, of humanity, of God.—*Rabindranath Tagore.*

As soon as it was known in South Wales that the Government had granted £4000 for the maintenance of a College, the towns of Cardiff and Swansea vied with each other to secure it. The Government required the locality to raise a sum equal to the amount of the grant; both towns had received promises of equal sums of money from private individuals,<sup>1</sup> but the Marquess of Bute offered an additional £10,000 for Cardiff and the Corporation of Cardiff promised a site of that value or the annual interest on £10,000 at 4 per cent. It was further stated by the Governors of the Craddock Wells Charity that, owing to the enhancement in value of the property left by Craddock Wells for the education of poor children in Cardiff, another £500 a year would before long be at the disposal of the College Council should Cardiff be chosen.

Lord Carlingford, Mr. Mundella, and Sir Frederick Bramwell were appointed to arbitrate on the respective claims of Cardiff and Swansea; they decided unanimously in favour of Cardiff, and in June 1883 Viriamu Jones was appointed Principal.

<sup>1</sup> Many of the sums of money promised for Swansea were afterwards given, even though the arbitrators' decision placed the College at Cardiff.

He wrote to his wife on June 28 :

I have been making a great many inquiries and getting all sorts of information about the history of the College movement [at Cardiff].

The keenest interest was felt throughout Wales in the new College. Dean Vaughan, the Dean of Llandaff, in his speech at the Eisteddfod held at Cardiff in August, said :

Wales has had great patience. She has submitted to stand and wait while other parts of the United Kingdom have been subsidised from the coffers of the Imperial Exchequer.

Loyal as England, interchanging with England all that makes the real currency of life, its living humanity—Wales has suffered in one respect from the very completeness of the incorporation ; her peculiarities have been overlooked in the general assimilation—her peculiarities of need and want, her particular points of involuntary helplessness—and the result has been that not until this present year of grace, 1883, has the actual step been taken of subsidising higher education in Wales by a welcome (but shall I venture to call it a very modest) offer of a pecuniary grant-in-aid. We are thankful, but we look upon this benevolence as little more than a trumpet call to energy and alacrity in helping ourselves. No one can say that we have slept upon small mercies. We have been up and doing, men of Cardiff, men of Swansea, men of every rank and every condition throughout the seven counties of South Wales and Monmouthshire. We shall suffer no jarring interests to divide us. South Wales and Monmouthshire shall have one heart and one soul in this thing. Cardiff and Swansea are one. Swansea has given to the new College some of its most honoured and prominent men.

What is yet more delightful is, that young Welshmen have heard the clarion blast in distant homes, and are throwing up English positions that they may come to the succour of their own Wales in this hour of her need and of her hope. One such man is the Principal of the new College—the honoured son of an honoured sire, who was in his day an eloquent pastor and preacher of a leading Welsh Communion, and who now drops his mantle, from the Paradise of his rest and his reward, upon a beloved youth, bearing his name, and destined (God grant it) to carry on in a new form and so complete and finish his work.

It is the dear wish of many hearts that this great week of characteristic Welshmanship [the Eisteddfod meetings] may give a sensible impulse to the high and holy enterprise. High and holy I call it—not least, I say it most thoughtfully, if, from circumstances to be deplored, but not ignored, it cannot bear



the Holy Name on its banner and its front. God is ever honoured by a reverent silence, where there cannot be the naming of the name without uncharity and discord. If I might suggest a watchword to this College, it should be taken from that solemn, that profound saying of the sweet Psalmist of Israel: 'Tibi silet laus, O Deus.' Him will we recognise in our heart's heart as the Author and Giver of every good and perfect gift, as much the gift of the wise and understanding mind as of the devout soul, the loving heart and the aspiring spirit.

At the time of Viriamu Jones's appointment the Council intended to open the College in 1884, but subsequently decided that the first Session should begin that autumn. This put great pressure on the Principal. Every detail as to the teaching staff had forthwith to be considered, the appointments advertised and made, accommodation found for the work of professors and students, the Prospectus for the Session drawn up, and his work to be left in order at Sheffield.

He wrote immediately on his election that 'it would be a worrying summer and that he greatly felt the need of rest.' He snatched three weeks in Switzerland. This was the second summer that he had a very short interval from teaching and administrative work. His holiday over, he wrote on August 15, from Cardiff:

The question of the temporary premises is as yet by no means settled. There is a desperate amount of work to be gone through. All sorts of letters require answering to-day.

I am afraid to promise yet to be home on Wednesday.

And next day:

I have written millions of letters on College business to-day and am as weary as an owl who has blinked all day and hooted all night.

I wish I could have come back to-night, but I have to see Mr. W. T. Lewis<sup>1</sup> (Bute's agent) on College matters to-morrow morning at eleven o'clock with Lewis Williams. There is a good deal of disagreement with regard to site, etc.

A few days later he went with the Dean to what proved to be the first of a series of meetings with the Corporation of Cardiff.

*August 19th.*—I entered Sheffield Station at 12.30 A.M., Cardiff

<sup>1</sup> Afterwards Lord Merthyr of Senghennydd. Died 1914.

Town Hall at 10 A.M. Meeting of the Council. At 11.30 we went to interview the Corporation Committee. They offered us rooms that will not suit : we replied to that effect and asked for £400 per annum, the interest of the promised sum of £10,000. They refused. We went to inspect the premises offered and afterwards to the Infirmary. All pleased with the Infirmary : probably on Monday we shall decide to take it.

The Dean was at the meeting and made a conciliatory speech to the Corporation Committee, but apparently did not convince them. I did not speak a word, not wishing to meddle with the matter.

In the evening I dined at the Deanery. The Dean was extremely kind, and Mrs. Vaughan. Perhaps you know she is Dean Stanley's sister.

I passed the morning looking over numerous applications [for positions on the staff]. This afternoon I went to the Cathedral. The Dean preached. The text was on Elisha's protection by the invisible hosts seen by the young man when his eyes were opened.

A week later Viriamu Jones made his first visit to Lord Aberdare, then President of the College, at Duffryn, and wrote :

Duffryn is situated in the Aberdare valley about half a mile above the overgrown mining village of Mountain Ash and some three or four miles below Aberdare.

The trains run here from Cardiff in about an hour. The lower part of the valley is well wooded. On each side rise high hills. The summits, above the level of cultivation, have grass enough to support a few wandering sheep. We ascended on Saturday and yesterday. On Saturday the view was restricted by the haze of an east wind. Yesterday we saw the bold outline of the Breconshire Beacons twenty miles off. All this morning the mist has been creeping down the mountain sides, and now it rains.

Lord Aberdare and I have been two gentlemen amusing an innumerable crowd of ladies. Lady Aberdare is delightful to look at, with hair that has turned white, declaring that it was never more beautiful. Her sister is like her. The many daughters—I cannot number them—all strong and apparently with work to do among the people round and with a gift of music but rarely found—complete a striking family.

Lord Aberdare himself, by his conversation full of point and literary charm, reveals an amount of reading through a lifetime that makes a poor man of science like myself envy the education of the past.

I return to Cardiff at 1.30 to a Council meeting. I shall return to Sheffield on Wednesday.

A fortnight later College business again called him from Sheffield to Cardiff. This time his host was the Dean, who wrote on September 3 :

See how I encroach ! Jayne<sup>1</sup> stays here the two nights, and I want you to do the same. I have a ' Prophet's Chamber ' for you where you shall be as quiet as you like. The one night we shall be busy forecasting the future, the next night we shall be talking over the eventful day.

Will you think me weak if I tell you that I even *dream* at night of the coming elections and the whole scene ?

At this election were appointed Professor Andrew Seth (now Pringle-Pattison Professor of Moral Philosophy in the University of Edinburgh) ; Professor W. P. Ker, who went in 1889 to hold the chair of English Language and Literature at University College, London (his successor was Professor C. E. Vaughan) ; Mr. Wardale, who held the chair of Latin for a short time and then returned to his old College, Clare ; Professor Roberts, now Principal of the University College of Wales at Aberystwyth ; Professor Tanner, who in 1894 was made an F.R.S. in recognition of his brilliant work in Mathematics ; Professor Powel, who held and holds the chair of Celtic Language and Literature ; Professor Thompson and Professor Parker, who, after long and devoted years at Cardiff, have not yet laboratories adequate for research. Of the lecturers, Monsieur Paul Barbier<sup>2</sup> is still at Cardiff ; Dr. J. W. James, lecturer in Chemistry, is now in Bombay ; Dr. Müller afterwards became one of the staff of the University at Berne ; W. S. Hensley was the Principal's second in Physics for several years and taught Physics at the College till his death in 1904 ; Mr. Templeton, who left Sheffield to take the lectureship in Music, and whose ambition was to bring classical chamber music to the knowledge of people who would otherwise have little or no chance to hear it, went from Cardiff after two years to pursue his missionary enterprise in Yorkshire.

<sup>1</sup> Dr. Jayne, Bishop of Chester, then the Principal of St. David's College, Lampeter, was a member of the Council of the College.

<sup>2</sup> The lectureship became a professorship in 1906.

It was a brilliant and a goodly fellowship.

From the deserted staff at Sheffield came a friendly moan :

DEAR MRS. JONES,—It is too late to remonstrate with you on the score of the Templetons. I *did* hope that you would leave them behind you, and I write now to make my moan and to ask for your sympathy in my desolation. I also send a photograph in case you should have completely forgotten me, at which I should not be surprised, considering the very insufficient consideration you have shown for my blighted feelings in removing, after yourselves, my only two other friends, the Templetons.

But for a while I am throwing these and such-like gloomy thoughts to the winds in the company of pleasant friends and a baby boy who is a sort of godson—and a very knowing rascal indeed. If he were a bit older and could suck his thumb like a man, I would take him back to Sheffield as a consolation.

I don't suppose we shall ever see you in Sheffield—shall we ? And it is such a long way to Cardiff, that I don't see how I am to come and see you four poor dear departed. And yet J.V.J. says '*Don't go to India*' !

I don't know *where* you are—whether this letter will ever reach you—whether I'm wasting my plaint upon the unsympathetic air. However, I shall commit it to the post, and leave the matter with Mr. Fawcett.

Yours very sincerely,  
PERCY A. BARNETT.

And again :

. . . You know, of course, all the men of light and leading here are agog with the new Technical School ; I hope they will succeed, if only to give them leisure to consider the more important question of providing the old College with things to sit on and to write on. By that time, however, I shall have accepted the possibly vacant post of door-keeper at Cardiff.

I suppose I have no chance of seeing J.V., and less of being honoured by a letter from him. It is, as I have often said, the interposition of a day's journey between friends is worse than if the whole ocean roared between them.

The College was formally opened on Wednesday, October 23, 1883. A general holiday was observed in Cardiff, and, though rain poured steadily, the town was thronged with people from the hills and the mining districts of the Aberdare and Rhondda valleys ; and long before the

appointed hour the large hall in Queen Street was crowded with an expectant audience.

Lord Aberdare thus began his inaugural address :

In such an hour as this, exultation at the success which has so far attended our efforts to advance the higher education of our countrymen is mingled with gratitude to those wise, far-sighted patriots, who gave the first impulse to the movement, who struggled against opposition, ridicule, and the icy indifference by which their unselfish endeavours were for many years frustrated—is chequered with grief for the loss of many of the foremost champions of that holy war and is tempered with anxiety, unmixed, however, with misgiving, for the final issues of an enterprise in the success of which our credit, our honour, our national character, are inextricably engaged.

Several writers in the newspapers have made merry over the 20,000 questions and answers published in the Appendix to the Report. I admit the number is appalling. I do not assert that all the evidence is of equal worth and importance ; I admit that the ignorance, prejudice, and passion which prevailed on the subject of education are reflected in these pages as well as the calm, wise thought and larger views which amply pervade them. But I venture to think that the picture they convey of Welsh thought and opinion would have been incomplete without exhibiting their weak as well as their strong points.

He emphasised the fact that the classes and laboratories, scholarships and exhibitions of the College were open on equal terms to men and women :

And women have not been slow to profit by the opportunities thus offered them ; the number of scholarships and exhibitions won by them in the recent competition, and the fact that the best scholarship was carried off by a woman, afford pretty clear indications that the assumption of intellectual superiority by men will be speedily tested by the stern logic of facts.

He concluded :

We possess an ample supply of elementary schools ; a large addition to our intermediate schools is promised ; the means to found our colleges have been supplied ; and a University, with its usual powers, will not be denied to us at the proper moment. These, indeed, are but the framework of an educational system. That is all a Government can give. Life, animation, activity must be breathed into it by ourselves.



This meeting over, a procession walked from the Town Hall to the old Infirmary Buildings, the future home of the College. Throngs of people blocked the pavement ; windows and balconies were crowded. The Head Constable and police, Fire Brigade and local Artillery led the way, followed by the Town Crier, Mace-bearers, Town Clerk and all officials of the Corporation, the Borough Magistrates, the Press, Clergy and Ministers ; next came the Mayor (Lord Carlingford), the President (Lord Aberdare), the Vice-President (Mr. Henry Richard), the Treasurer (Sir Hussey Vivian) ; and after them, between the Council of the College and the Court of Governors, the Principal and the Senate walked the swimming streets in gown and hood, followed by subscribers to the College, County magistrates, representatives of the local educational institutions, of the Miners Federation, the Trade and Benefit Societies, and the Burgesses of Cardiff. The children of the schools brought up the rear, but left the procession half-way to partake of the feast provided for them.

At the Old Infirmary Lord Aberdare opened the door and was received by Mr. Lascelles Carr and other members of the Council ; before they entered prayer was offered and the blessing given by Dean Vaughan.

The procession passed through the buildings, and then the whole company hurried through the relentless downpour to luncheon in the Drill Hall.

Lord Carlingford, in his speech, claimed for the new College that it was a Welsh rather than a Cardiff institution — ‘ Welsh in its origin, its aims, and its methods, without rejecting the aid of the best learning and talent and the greatest genius for the strengthening of the teaching power.’

Mr. Henry Richard recalled the time when, though the forefathers of our respected Anglo-Saxon neighbours had scarcely emerged from heathen barbarism, there were flourishing colleges dedicated to religion and learning at Caerleon-on-Usk, Bangor Iscoed, and St. David’s, whence men, trained in all the learning of their times, went forth as monks carrying the fame of their country’s piety and erudition into <sup>ev</sup>all <sup>y</sup>parts of Europe.

Moreover we are told by Thierry in his book on the Norman Conquest that when Alfred the Great was about to found the Oxford University, he obtained the help of three scholars from St. David's : Asser to teach grammar and rhetoric ; John Menevensis, logic, music and arithmetic ; John Erigena<sup>1</sup> for geology and astronomy. The University College, therefore, rather than a new institution, was a revival—or re-birth.

Mr. W. Abraham, M.P. (Mabon), who represented the colliers of the Rhondda valley, said that they thirsted to drink deep of the waters of the Pierian spring. He urged that their children should be instructed in the principles of political economy, as taught by the best masters ; that, with their home lessons of daily experience, would so influence their minds as to act as an antidote to strikes and lock-outs.

Professor Rhŷs, gave the toast of ' The Senate.' ' They may appear to you to be a very young staff,' said he, ' but some are already distinguished for original work, and others are full of energy and readiness to work. Youth, hope, and promise go together.' He compared the scanty equipment of the Welsh ministers with the seven years' academical training of Scotch ministers, and the qualifications of Welsh with those of Scotch schoolmasters, who, even under the School Boards, were usually graduates of a University.

Viriamu Jones, replying, said :

I left Sheffield because I thought this was the dawning of a remarkable era in the educational and intellectual history of Wales, and that no nobler task could fall to the lot of any Welshman to-day than that of instituting this College wisely, and attempting to guide it aright in infancy, so that it may become a great and lasting benefit to the Welsh people. I had intended to say something of the functions of a University in Wales, but at this late hour I will, in spite of your persuasion, refrain. I have great confidence in the future. Since the passing of the Education Act of 1870, no child need be without the key with which he may, if he chooses, unlock the portal of the treasure-house and win a rich reward. The universities—I mean the ancient ones—have been dipped in the cauldron of Medea and are young again. Centuries ago Jack Cade and others made it an excuse for taking the head of Lord Saye that he had corrupted

<sup>1</sup> Bale is the authority for this statement which is not accepted by any modern historian.

the youth of this country by establishing a Grammar School wherein he had taught some of the people of the realm to talk of nouns and verbs. Your fate will be different, my lord. Your name will be held in honour throughout Wales for the part you have taken in initiating this College. That is the spirit of our age, and Wales will not be out of harmony with it. To conclude, in the words of John Milton, I hope for the students of this College, that they will be 'Inflamed with the study of learning and the admiration of virtue, stirred up with high hopes of living to be brave men and worthy patriots, dear to God and famous to all ages.'

Thus, in his first speech in Wales, he had planned to show the need of a Welsh University.

On October 26, 1883, Viriamu Jones addressed the meeting held to inaugurate the first Session.

The vision of the completed fabric of the Welsh educational system was ever before him: this was his first opportunity of sketching it before a public audience:

We have to look to the future rather than to dwell on the past. It will be useful at the beginning of our first Session to state as definitely as possible the aims and objects of this institution, and what it can do for the Welsh people. It is a College one day to be affiliated to the University of Wales—a day, we hope, not far off. We must aim at that; we must not be content with less than that. The various Colleges of Wales will be isolated units till the University of Wales exists, not in name, but in fact. The inauguration of the new Colleges is the first step towards it. When the University is founded it will, I believe, bring about a harmony of sentiment and interest between the Colleges affiliated to it that cannot be attained in any other way.

Let us consider what the functions of a University are, what duties it has to perform, and what work it is essential that it should do.

The duty of a University is fourfold: to teach; to examine, conferring its degrees and diplomas on successful students; to encourage original investigation in all branches of knowledge; and to control the intermediate education of the country.'

After dealing with the differences in the methods of school and University education, the Principal proceeded:

The question arises, who is to do the teaching? At Oxford and Cambridge the University teaches and the Colleges teach, and for a great part of the history of these Universities the main

teaching has been done by Colleges. But in Scotland and Germany the Colleges do not exist as distinct from the Universities. A new condition of things has arisen in England, and now, I rejoice to say, in Wales. Colleges are being founded in towns widely separated from one another, and it has become necessary not to leave them without the power of conferring degrees upon their students, while it is still inadvisable to multiply too largely the degree-giving corporations of the kingdom. A University of this kind, with affiliated Colleges in places far apart, such as we hope will be founded in Wales, will not be able to do the main part of the teaching as one corporate body; this function will have to be discharged by the individual affiliated Colleges.

Speaking of examinations as the only method then open to the University for the purpose of picking out those deserving the stamp of its approval, Viriamu Jones said :

My opinion is that when the Welsh University is constituted, the Examining Board ought to consist partly of the professors of the various Colleges and partly of external examiners. The internal element will afford scope for development in accordance with the characteristics of Wales; the external will ensure an interchange of sentiment with the outside educational world.

The Principal's address dealt also with the aims and opportunities of the student entering upon his University career : ' The University embodies in its scheme the principle that from a more or less superficial knowledge of much to the thorough knowledge of a little is the true intellectual progress.'

He concluded :

Though we cannot undertake the examining duties of a University for the present, the University of London will do this for us. Its examinations will guide your work, and success in them will confer upon you the customary mark of distinction—a University degree.

Viriamu Jones's task at Sheffield was simple compared with that he found at Cardiff.

Firth College had to be revived, reorganised, and developed, the Sheffield world to be persuaded of its claim to support. But there was accumulated wealth in Sheffield, and, once persuaded, its wealthy citizens gave freely their moral and material support.



In South Wales the College, though it had the nation's sympathy, had to face the prejudices and opposition that such an important institution would necessarily excite.

From the beginning its income was inadequate. Larger means to meet present expenditure were already needed as well as funds for future developments. Of the fortunes amassed in Glamorganshire and in South Wales a considerable share had been made by Englishmen who returned to settle in England; and many of the landowners did not appreciate or approve of the popular need of education. The industrial development was recent compared with that of Yorkshire; for instance, though the population of Cardiff in 1880 was over 80,000, in 1800 there had been but 1800 inhabitants.

Each week of the first Session revealed more sharply the lack of previous training in the students as well as the fact that the character of the courses of study laid down by the London University for its degrees was in some respects but ill-suited to their needs.<sup>1</sup> The Principal must, therefore, take part in an active campaign for an Intermediate Education Bill and for the creation of a public opinion in favour of a University for Wales. Experience at Sheffield had convinced him that three educational reforms were urgently needed: university training for ministers and for elementary school teachers; and for artisans, technical instruction in the theory of their crafts.

It was no less important for his students' and his own sake to carry on scientific research.

Further, he hoped to inspire a tradition and foster a corporate spirit within the College walls; there were from the beginning nearly 100 students, and it was the first College in Wales open to women on the same terms as to men.

It was no new thing for educated Welshmen to desire a national University, nor to aim at the equality of men and women and the education of all sections of the community. But Viriamu Jones, from the moment he began

<sup>1</sup> For instance, one member of the staff protested against the work at the College being so greatly hampered by its dependence on the orders issued by the London University, and the imposing by the Senate of the University of a wrong sort of task on its students and upon their teachers.



to work in Wales, saw the problems of elementary, intermediate, technical, and university education as a coherent system. Mastering the conditions in the educational world around him and seeing in them this ideal order, he put his conception continually before his countrymen in public speeches and in familiar conversation, and took his part in deputations, conferences, and committees, till Wales was organised in an united demand for a University.

The task was a heavy one, but as at Firth College there were friends at his side.

It was said of Viriamu Jones at Sheffield that he rapidly won the confidence of men twice or thrice his age. At Cardiff, Lord Aberdare, the President of the College, and Dean Vaughan from the first gave him their support and friendship. At Duffryn, he and his wife spent many a delightful week-end in rest and recreation. Both Lord and Lady Aberdare gave to the College abundantly of their thought, time, and devotion. As the Principal said :

At a time when most men, after a distinguished career in the political world, are thinking of retiring to well-earned rest, Lord Aberdare with buoyant, youthful enthusiasm braced himself to a new task which proved perhaps to be the greatest work of his life—the task of reorganising the university and intermediate institutions of Wales. He found in the people an interest in their educational institutions which he was wont to describe as passionate. He threw himself into the spirit of the movement and became its leader by right of his high and enduring service, his mature wisdom, his deep knowledge of the educational system of Wales and its needs, and his wide public experience as a member of Parliament and as Minister of the Crown.

Lord Aberdare made his last public speech at the College in February 1895. He spoke with characteristic hopefulness and faith in his fellow-men. Only two months earlier he wrote to the Principal: 'My bodily strength is probably as good as it ever will be, very good for my years.' But before he started for this meeting he referred to his advanced age, saying, to the keen distress of those who heard, that though in mind and spirit he felt no diminution of will to work or of mental powers, his bodily frame was failing. For him, to live meant to be up and doing.

Lady Aberdare was not less interested in the College. In her the women-students had a friend who felt deep concern in their welfare. She recognised the effect of their educational disabilities upon women and that this could only be modified by degrees, advocated the admission of women to equal opportunities with men but deprecated rivalry or competition.

When the project of a new Hall for women-students was discussed, it was her view that, since the personal influence of the Head of a Hall should be an important element in relation to the development of character in the life of women-students, not more than sixty or seventy students should be associated under one principal.

Lady Aberdare brought illuminating judgment and a masterly grasp of details of finance and administration to the meetings of Council and Committees in such gentle fashion that, when a distinguished officer of the Welsh University spoke of her as a great woman, we, who had loved her human touch on men and things, felt how right he was, yet wondered that we had drawn so near to her. Her coming was welcomed with joy. In her charming personality were united wisdom, loving-kindness, and a delightful sense of humour, and people left her presence with an enlarged sense of happiness in work and of what women might be and do.

Dean Vaughan received Viriamu Jones with the glad and tender confidence which a father gives to a favourite son, and his friendship deepened with each year. Dr. Vaughan was Master of the Temple as well as Dean of Llandaff: his finished scholarship, his strength of character, his liberality of thought and feeling, knowledge of men and grasp of the social and intellectual forces of the day, fitted him for place and power. But he refused to accept the bishopric of Rochester, and it was in Wales that the chief work of his later years was done. His election as President of the College was proposed by Mr. Alfred Thomas (now Lord Pontypridd of Cardiff), a Nonconformist, seconded by Mr. Lewis Williams, a member of the Wesleyan body, and supported by Bishop Hedley, who held the Roman Catholic

See of Newport and Menevia. In 1888, he wrote to the Principal: 'You always think too much of me as a factor in the interests of the College, and you cannot indeed exaggerate my love for it.' This was his feeling to the end.

Coming from his unceasing labours for the Church he served, there was about him an air of detachment as of one dwelling on serene mountain heights; but so great was his kindness for others and courtesy to all men weaker or less gifted than himself, that his presence brought a sense of well-being and strength to all—he touched the harshest differences with genial consideration and subtle humour, and before his influence the shadows of discord fled away.

For Dean Vaughan, too, Viriamu Jones might have said the words spoken by him on the loss of the friend whose wisdom, sympathy, and patient courage had been with him from the beginning of his life in Cardiff:

To Lord Aberdare, as he was known to them, in his ripe old age, full of loving care and consideration for all sorts and conditions of men, they might fitly address the beautiful words of Matthew Arnold:

'Servants of God or sons  
Shall I not call you, because  
Not as servants ye knew  
Your Father's innermost mind,  
His who unwillingly sees  
One of his little ones lost;  
Yours is the praise that mankind  
Hath not as yet in its march,  
Fainted, and fallen, and died.'

The Council numbered over fifty members. With them Viriamu Jones worked in relations of mutual respect and sympathy. They prized his great gifts and trusted in his leadership, and not a few entertained a more personal feeling towards him.

The Rev. William Evans of Pembroke Dock, one of the first sixty Governors<sup>1</sup> of the College, said of him:

I like to think not only of his greatness, but also and particularly so of his goodness. It is a pleasant recollection to me

<sup>1</sup> The body who were summoned twice a year from all parts of South Wales and Monmouthshire. There are now over three hundred governors.

that he once stayed over night under this roof. He was so natural, so simple, so kind. And I always found him the same everywhere we met. Of course, I greatly admired his remarkable and varied abilities. But I loved the man.

Just as happy and even intimate was the feeling of the staff.

'The friendships I formed among my colleagues on the staff there, can never, I feel, be equalled by any future friendship. We were all young,' said Principal T. F. Roberts; 'we began together a work which we all felt was our own.' It was this friend of whom Viriamu Jones said, at Aberystwyth in 1892, that it had been necessary at Cardiff to institute a 'Roberts Protection Society' to prevent him from overworking.

On Saturday afternoons the staff usually met to walk, perhaps on the big or little Garth, through Cwrt-yr-ala Park or to Leckwith Hill, whence Cardiff, a city of the plain, is seen spreading to the Bristol Channel; or to Caerphilly Castle, where a rainy afternoon sped in rounders or other games in the big banqueting hall; and not infrequently, returning in the evening through fields or driving on the country road, some one would sing the old ballad of Widdicombe Fair, or all would take part in catches:

Tom Pearce, Tom Pearce, come lend me thy mare,

All along, down along, out along lee,  
For I want for to go to Widdicombe Fair

Wi' Bill Brewer, Jan Stewer, Peter Gurney, Peter Davy,  
Dan Whiddon, Harry Hawk,  
Old Uncle Tom Cobley and all,  
Old Uncle Tom Cobley and all.

Often neighbours and members of the staff met in the Principal's home in the evening. Mrs. Vaughan used to say a good hostess needed only tea and coffee and two candles. Viriamu Jones's guests were thus simply entertained, and it was a rare delight to listen to Schubert's and Schumann's songs, sung with extraordinary dramatic power by Mrs. Templeton. Sometimes they read Browning's plays and poems, then little known and generally deemed

obscure, and keen were the discussions which ensued. From these beginnings lasting friendships grew.

Mrs. Champion Russell, who often joined the party, writes :

At the Browning readings held every few weeks at his house, he was the keenest of disputants, the most eager to get at the author's thought, and however tired and worried he might be, his interest never flagged ; and as he became engrossed, all sign of fatigue vanished ; he could be serious at one moment, quite boyish and full of fun the next. He never seemed to think his opinion more worth having than anyone else's. Sometimes it was a little alarming to have an opinion, thrown out at haphazard, gravely considered ; or if he made fun of it, he did so with a merry twinkle in his eye that disarmed resentment. He had the happy faculty in conversation of arousing intellectual interest. He beguiled people into thinking there were unexpected depths in them, even veins of originality. Perhaps he put in before he took out, like the deceptive mining expert ! or a stray remark set his mind to work on lines of its own. But if he suffered fools gladly, no one more enjoyed the exhilaration of talk with his intellectual compeers, it was a great pleasure and refreshment to him.

Beyond this friendly circle, the Principal and members of the staff received not only genial welcome but sympathy and help in their efforts to bring the College into living contact with the people of the town. When the staff gave a concert of chamber music at the Town Hall, the local newspapers published the programme, criticised the performance, and gave a full list of the guests as though it had been a function in Mayfair. These chamber concerts were arranged by Mr. Templeton. He collected donations ; the staff persuaded the artists to accept hospitality instead of hotel expenses, and thus the concerts paid their way without help from the Council. When Mr. Templeton resigned, his work was continued for several years by a committee of the College Senate ; of late by a local committee who still carry it on. The students were also welcomed in the Principal's house for games and talk ; and since most of them were Welsh, the talk was often argument and discussion, and the group of men who had arrived shy and self-conscious, under his inspiration found unsuspected



powers. As one of his first students of that company who called themselves the 'Pilgrim Fathers' wrote :

The Principal did not always stand upon a pedestal to lecture us, and did not confine his attention to examinations and degrees. He came down to us in all sorts of ways, and this was, perhaps, the secret of his great hold on us. I remember on one occasion when I visited him his giving me a lesson on public speaking on the sounding of the 'w' (in parts of Glamorganshire the native says 'ooman for woman), and the dropping of the 'h., He himself was, I believe, an earnest student of oratory, and declared himself fond of Disraeli's style. At any rate, I have still in my possession a book he gave me when discussing the matter, Froude's 'Disraeli,' with an admonition that I should read it carefully.

At a party at his house, I remember being asked by one of the ladies if I had ever been to Rome and seen something or other. What a question to one who had never been outside Wales! As much as I could do, then, was to cover up my ignorance, be silent and listen to everything. But the hostess herself was a more comforting neighbour. I remember her asking me if I could play chess. This, as it happened, was one of my few polite accomplishments, and she must have guessed it. But, whilst she was in search of the chess-board, I suddenly remembered that she came of a family well known for their skill in chess, and it was with very gloomy foreboding I awaited the advent of the board. I bit my tongue that it should have betrayed me into such a snare, for I knew just enough chess to realize what an abyss there was between an expert and an amateur. But the gods protect the unwary, and on this occasion the chess-board could not be found, and I was free once more to look on and listen.

One evening, a student, a man of fine moral and intellectual fibre, confided the disadvantages he felt in having had no social experience. As he approached the door, having never before set foot in a house with carpets, he had said to himself : ' If I make any mistake they will never ask me again ! ' To the eager inquiry : ' But we did ask you again, didn't we, Mr.— ? ' his ' yes ' was a great relief. Such confidences confirmed the Principal's resolve to give to his students every opportunity of social experience he could. In this as in all else the staff gave him generous help.

It is with nothing less than wonder [wrote one of the students some years after leaving] that I look back on the unvarying kindness, during my three years in Cardiff, of so many distinguished scholars to an unschooled youth, with nothing to recommend him but ambition.

It was hardly to be hoped that no trials and disappointments should arise. Early in this first Session one serious breach of discipline occurred. Great damage was done in the Students' Common Room. The Principal called the students together and spoke to them. First he praised them for what they had done well. Then he showed them what their Common Room should be and what they had made of it. Next he declared that he knew the mischief was the work of a stupid half-dozen, but that they were all responsible. He then spoke of the suggested remedies—either to take away their Common Room or to raise a fund for repairs by levying caution-money from every student entering the College. He was loath to be driven to such courses with grown men. He proposed instead that the offenders should come forward and detail their misdeeds. He added that the students must act together, form a committee, and govern their Common Room themselves. All must join him in maintaining the honour of the College, and all must work together for the coming University of Wales. Thus in a short speech he roused in turn pride, disappointment, shame, responsibility, individual courage, public spirit, patriotism, and the offenders came forward to accept their penalty.

Speaking to the students some years later he told them :

The greatness of a College rests and must rest upon the character of its members.

The basis of high character is truth and honesty in thought, word, and deed. Intellectual gifts may be abundantly possessed, but, without character, are less than nothing and vanity. Lay the foundation deep and firm on a rock of truth that cannot be shaken because it is one with eternal Law.

He was anxious to help his students in all ways. For instance, after discussing their class work in 1884, he said :

Do not neglect your moral and religious education. Though

the work we do together is not directly, perhaps, moral or religious, surely it is not wholly without result in such direction :

‘ Yea, if thou criest after knowledge, and liftest up thy voice for understanding ;

‘ If thou seekest her as silver, and searchest for her as for hid treasures ;

‘ Then shall thou understand the fear of the Lord, and find the knowledge of God.’

Your relations to one another here should lead you to a higher moral level. Helping one another you should realise more fully the meaning of social duty, and so prepare yourselves to help your neighbour in the widest sense when the arena is enlarged and the struggle takes place, not in youth within College walls, but in the mature strength of manhood in the broad world beyond. You are, many of you, starting life on your own account, having left for the first time your family circle, being removed for the first time from the influence of home. Prize your independence. Remember the words of wisdom :

‘ Happy is the man that findeth wisdom, and the man that getteth understanding.

‘ For the merchandise of it is better than the merchandise of silver, and the gain thereof than fine gold.

‘ She is more precious than rubies : and all the things thou canst desire are not to be compared unto her.

‘ Length of days is in her right hand ; and in her left hand riches and honour.

‘ Her ways are ways of pleasantness, and all her paths are peace.’

He always expected the best from his students ; and in his personal relation to them they realised behind that expectation the reverence which he felt for every human being, and which, giving them new faith in themselves, drew them to him in the surest of all bonds.

In the first Session, too, a corporate life grew up among the students. St. David’s Day, 1884, was celebrated by a luncheon at one o’clock with the customary toasts and speeches, from which the company dispersed at five, only to reassemble at seven, when the students entertained the Principal and other guests with a concert and theatricals until half-past ten. Miles, the porter, and his wife bestirred themselves to transform the rooms to an aspect of frivolity, and entered into the spirit of the festival with friendly zeal.

For generations of students 'Miles' was the chief subject of the annual topical song.<sup>1</sup> A Welshman from Pembroke-shire, he was the first porter ; but, single-minded as he was where the interests of the College were concerned, he was not to be persuaded to wear regularly the formal uniform of a college servant, having a mind to be more useful than was consistent with the dignity. He put up, or supervised the putting up of, the wooden sheds which gradually covered the spare land about the College, and in numberless ways helped the finances of the House Committee. It was with a sore heart that he left—on account of age and failing health—the old College and its additions, so largely the work of his own hands.

While energy and effort were directed to building up the best traditions in the community within the College walls, its aims were not yet universally understood or accepted. Some people looked with disfavour on a collegiate education for girls, considering that a woman who had taken a degree would thereby lose her domestic capacities. Co-education, familiar in America, had hardly in England entered on its experimental stage. The Cardiff College was the first mixed College in Wales.<sup>2</sup> There were criticisms, overt and outspoken. These added to the Principal's sense of responsibility, since misunderstandings might limit the usefulness or alienate a possible donor to one of the ill-provided funds of the College. Among the subjects of interest touched on by the Principal in his report of the first Session was this of co-education. He said :

- <sup>1</sup> ' Shall we judge such themes unworthy  
Of the poet's lofty art ?  
Is there a subject sweeter  
Than Miles's apple tart ?  
Soft is the song of the throstle  
Perched in the greenwood tree ;  
But her sweetest voice is discord  
To his voice, when he calls for " tea." '

In another a student foretells that one day the Principal will establish—

' Marble halls with lifts to mount in,  
Miles's statue and a fountain.'

<sup>2</sup> At Aberystwyth there were mixed classes in the department of Music from 1873 ; but not till 1884 did the first ' regular ' woman-student enter this College.



The experiment, if experiment it can be called, of classes composed of students of both sexes has been most successful. I desire to point out to the Council the necessity for opening a Hall for women students. I cannot too strongly recommend the Council to give this point their most careful consideration.

He realised the danger to health for the women-students in lodgings. Many of them worked from five to midnight on little more than tea and macaroons. They neglected exercise and were full of schemes for economising food and sleep, so that a place where they would have regular meals and opportunities for recreation as well as facilities for study was urgently needed. He realised, too, the advantage they would gain from the corporate life of a Hall of Residence. The great difficulty was, as usual, money. Several friends of the College, among whom was Lady Aberdare, collected. Out of the modest sum of £800 needed to furnish the house and to open it free from debt, £600 was given in Cardiff; and in May, Lady Aberdare made an appeal to the districts for which the College had been established to show their interest in this national undertaking by making up the balance. The appeal was responded to, and the Women's Hall was successfully started in October 1885. Lord Aberdare's daughter, the Hon. Isabel Bruce, generously offered to act as Principal. Mrs. Vaughan commented on her practical capacities :

Miss Bruce's economy is too marvellous, really! I should like to send her out as an itinerant Teacher of Housekeeping. I have some friends who, though they live alone, think themselves paupers on £800 a year. I should dearly like to send our Lady Superintendent to act as their housekeeper for a few weeks to show them that economy and comfort *can* go hand in hand.

While of her own problems as Principal she has written :

Aberdare Hall was started by voluntary effort; residence in it was not compulsory and the College regulations were the same for all students. The authorities of the Hostel were a body entirely distinct from the College Governors; they had to see to the conduct of their students—College regulations could not be altered to suit the convenience of the Hall; so for a time the Governors of Aberdare Hall had to tread warily, to gain their ends by gentle suasion.



For instance, there was no rule against mixed picnics, and a picnic meant a twelve hours' day at the end of the summer term at which the students were free to make their own arrangements. Naturally they liked to be left to their own devices. From their point of view they were independent and quite capable of looking after themselves; from the point of view of the Hall there was the inevitable Mrs. Grundy to be considered. More than once clear-sighted and anxious-minded ladies of Cardiff had heralded their observations with the dreaded 'I think you will like to know' (which sent a sensation as of an oyster crawling down the back), and then followed precise records of some indiscretion among the students—not very serious in itself, but which for the credit of the College had better not have occurred. The Principal would in no case interfere; the Hall must fight its own battles, must create its own traditions and prove to its students that, since the world was made long before they were, it is wisest to conform to some of its usages.

So students' picnics and dramatic societies continued for some time unmolested, except that the Principal of the Hall was present at rehearsals, and that she and one or two Professors' wives contrived to get themselves invited to the picnics. In the eyes of the world the proprieties were observed, and if among the ruins of Caerphilly, young couples disappeared as by magic while the self-constituted chaperons were left to confront each other, they had at least the satisfaction of feeling that they knew their merry crew better than the outside world, and were saving them from much tittle-tattle by remaining twelve hours on guard.

In time, even the students most vowed to independence saw the need of rules for the weaker brethren, and submitted with commendable public spirit. So the change was brought about without a revolution. In fact, it came by evolution with the consent of all parties. Therefore, though I regretted at the time that the Principal held his hand, I have since recognised that he showed a far-seeing wisdom in his patience.

When the name of the Hall was under consideration, Mrs. Vaughan wrote:

Do you know that we have had the audacity to christen the Hall ourselves? The Dean said directly I asked him to think of a name, '*Aberdare Hall*,' and Aberdare Hall it is to be. I quite think it is the best and most melodious name on the list of Ladies' Halls.

After many years of successful experience of mixed classes, it is difficult to realise how disturbing were these early apprehensions, or the great anxiety they caused; nor

is it now possible to appreciate the distress felt among the friends of the College when it became known, in November 1883, that a member of the staff had associated himself with the National Secular Society, of which Charles Bradlaugh and Mrs. Besant were members. To no one was the discovery so painful as to Dean Vaughan, who had taken the keenest interest in the College and thereby incurred the disapproval of those Churchmen who believed only in an education associated with definite theological teaching.<sup>1</sup> The College was undenominational, the appointments made on purely academic grounds ; yet many members of the Council thought that in this matter they ought to override the constitution and dismiss the Professor. After an interval wiser counsels prevailed, though the following note from Lord Aberdare shows how disturbing the incident was :

I am very sorry to hear of the reports as to the Dean's contemplated resignation. . . .

It is not impossible that he may be worried by letters condemning his course. I have received several intemperate ones approving the Council's vote, but placing the University College's action on a wrong issue.

In spite of his strong feelings on the point at issue, feelings so strong as to suggest, for a time at least, the necessity of his resignation, Dean Vaughan decided to retain his seat on the Council, and wrote to the Principal :

I should be *very* sorry if, after all that has passed, the Statutes were now to be overhauled in detail by the Government before the Charter is granted.

It would risk very much of the harmony which has resulted from a careful and delicate handling of delicate matter in the region where they are thoroughly *understood* as they cannot be in Whitehall.

For yourself I am anxious at the thought that the new climate does not and cannot suit you, and *your work* is such as demands every appliance to make it possible. Think whether after all you must not resign yourself to Penarth,<sup>2</sup> at least for a time.

<sup>1</sup> Many Nonconformists also expressed the wish that the constitution of the College permitted some official religious observance, but owing to the sectarian difficulties revealed in the Report of the Departmental Committee, the precedent of University College, London, Owens College, Manchester, and others recently established, was followed.

<sup>2</sup> A suburb on higher ground four miles out of Cardiff.

Glad shall I be to be near you again—able always to show you as one cannot at a distance how large a part you have in my sympathy and in my affection.

For a time this episode, which was the subject of much correspondence in the Press, seemed to give colour to the forebodings of those who regarded the College as a 'godless institution.' The very wives of the professors would, at this time, be searchingly questioned as to the religious convictions of members of the staff during the course of an afternoon call.

Even the Principal was sometimes misunderstood, and was given credit for actions which would have offended Welsh feeling of the day. During the week-end visit from a Nonconformist friend, their guest and his wife attended the Congregational Chapel on Sunday morning; on their return the visitor said most earnestly:

I must tell you, Principal Jones, how glad I am to have been to Chapel and to have sat in your own pew. In North Wales people say you fish on Sundays, but now I can reply 'They not only go to Chapel but rent a pew.'

This was a curious rumour, for Viriamu Jones was no angler.

The professors, too, were criticised. Some of the staff used to take long rambles on Sundays, and thus offended, and the Principal was blamed for the offence.

Such comments, uttered by Welshmen in Wales, discouraging as they might be, were not mere gossip or idle fault-finding, but rather a measure of the high hopes centred in the colleges long waited for and greatly prized, and of the deep anxiety felt for every detail that touched, or might be an indication of, their welfare.

We are beside thee in all thy ways  
With our blame, with our praise,  
Our shame to feel, our pride to show  
Glad, angry—but indifferent, no!

A slighter matter, too, now occupied the Principal and President. The latter wrote on December 15, 1883:

DEAR PRINCIPAL,—The Dean has referred the question of the College Motto to me. He has, however, himself suggested as good a Latin one as I could think of—it is ‘*integros accedere fontes.*’ The capacities of a Seal are not large or I would much prefer the fuller quotation : ‘*Juvat integros accedere fontes atque haurire.*’<sup>1</sup>

If we are to have a Latin one I can think of no better.

Which think you ? I incline to Latin as still being to some extent the common language of cultivated men.

Sincerely yours,

ABERDARE.

And again on December 20, 1883 :

I am glad to know that the Lucretian motto was accepted, although not in its integrity.

You will find Professor Rhÿs prepared with a pair of Welsh mottoes for choice, although he does not seem satisfied with either of them.

What becomes of yourself and Staff during the Xmas vacation ? Scattered, I presume, like a startled covey ?

Sincerely yours,

ABERDARE.

Supported though it was by the people of South Wales and by the leading educational authorities, the College had at first to face two adverse influences—the distrust of those who regarded it as an anti-Christian institution, and the unfriendly attitude of the endowed schools and grammar schools.

Dean Vaughan had welcomed the College and its Principal with enthusiasm ; and the Primate, visiting Lampeter in 1885 to lay the foundation-stone of a new wing, hailed the new national colleges with kindly sympathy :

If theology was really the queen of sciences, then there was not one science which theology could fear. The foundation of the new Colleges would tend to the good of Lampeter. They were not founded upon a religious basis as Lampeter was ; it was impossible they should be, for good men in all directions stretched out a helping hand to those who wanted education in their several walks in life, and who must have it near them, and the circumstances of the time and not those benevolent

<sup>1</sup> *Lucretius*, i. 327.



men were to blame if they could not be as united as Lampeter.<sup>1</sup> He should think very differently of Wales if he thought it possible that these Colleges could be what some people were pleased to call godless Colleges. He could not believe that Wales would not find some means or another by which they would be religious even if they could not be religious after their own way.

At Lampeter they admitted into their ranks people whose opinions upon most important matters were not theirs, and most heartily must all lovers of true education rejoice to hear that the Nonconformist students who came among them found themselves at home.

Ten days later, speaking in the Park Hall at Cardiff, Viriamu Jones had to defend the College and the cause of higher education, to point out that the success of the College was not won at the expense of any other institution, and to proclaim its aims and its ideals which were still the subject of serious public misrepresentation. A distinction pronounced with authority had been drawn between theological and secular training,<sup>2</sup> and with special and disparaging reference to the University College. Other institutions, it was stated, generally showed young men the way of ascending the ladder leading to earthly ambitions, while those of St. David's, Lampeter, showed them how to ascend the ladder of heavenly ambition. The Principal felt bound to protest.

With God's help, by their persevering endeavour, and with the help of the Bishop, clergy, and ministers of all denominations, the accredited religious teachers of the people of which they (the students) are a part, they will ascend towards heaven with as firm a step and with no less certain reward than if they had been educated—if they had received their University education—at an institution more theological than ours. But I go further and say that, though the subjects we teach have not the eternal importance of religious truths, nevertheless they are not without spiritual influence. I maintain that all true knowledge makes for righteousness. I have more than once of late been led to ask myself this grave question—a question grave for the Church and for the country: 'Is the Church in Wales going to repeat—at the end of this century, too—the attempt to check the tide

<sup>1</sup> On this occasion Lord Aberdare said that the work of the Church had greatly improved during his life, owing, in great measure, to the piety and vigour of the clergy from St. David's. There were then 140 resident students at Lampeter, besides some non-resident.



of popular enthusiasm in a good cause by endeavouring to obstruct the wave of educational revival that is passing over the whole of the Principality? I hope and pray that this may not be the case—that all sections of the community—Churchmen as well as others—will be guided by their wisest and most enlightened leaders in making up their minds upon the educational questions which are agitating the country to-day, and that we may, as a result, have uninterrupted, peaceful, harmonious, and progressive improvement in our educational system.

This was the only public occasion on which a defence of the College was necessary on these lines. In that small section of the community, as time went on, not only did tolerance succeed to distrust, but understanding grew with knowledge; and, although by the provisions of its Charter the College could not teach theology, it ceased to suffer reproach as a 'godless institution,' and, both at this early stage and through successive years, derived generous support from the Church in Wales.

The attitude of the schoolmasters was at first one of protest. The head masters of the endowed, grammar, and proprietary schools met at Shrewsbury in 1884 to form a provisional committee for the protection of the 'old foundation schools which had borne the heat and burden of educational work in the past and which, in the opinion of many, have never been in a more efficient condition than they are at present,' and 'to watch the progress of the Intermediate Education Bill for Wales.' The resolution passed included a suggestion that 'the age of admission to the state-aided Welsh Colleges should be raised to seventeen and that there should be such an entrance examination as would effectually protect such Colleges from the necessity of undertaking elementary instruction.'<sup>1</sup>

At the dinner at Jesus College, Oxford, on St. David's

<sup>1</sup> The minimum age for admission had been fixed at sixteen for the sake of students who could not spare many years for their education. The old foundation schools wished to raise the age, lest they should lose their pupils a year earlier. This wish arose from a misunderstanding. At the end of the first session the average age of students was found to be 20·6 years. The College in no way robbed intermediate schools of their pupils, but because of the scantiness of intermediate education was compelled to devote the student's first year or junior course to preparing for the London Matriculation.

Day, 1884, replying to the toast of the 'Schools and Colleges of Wales,' Viriamu Jones said he was glad it should be thought 'possible for one man to represent the schools and colleges of Wales, because the understanding between these two classes of educational institutions had not, if report spoke rightly, been such as wise men would wish it to be.' He pleaded for 'a more cordial understanding, that schools and colleges should live together in peace and unity of spirit and help the great movement towards a better system of national education.'

Yet these apprehensions were not allayed even in 1888, when Viriamu Jones, at the Prize-giving of the Carmarthen Grammar School, said :

The head master, in writing to ask me to be present on this occasion, wrote a sentence with which I desire to record my most cordial agreement, and that is, that it is exceedingly desirable that 'the connection between the colleges of Wales and the schools should be as close and as intimate as possible. I have, ever since I came to Wales, been saying this, and have felt it intensely. The colleges without schools to rely on for trained material (the boys are frequently spoken of as 'material')—the college without schools to feed it, is like a tree that roots and cannot grow. I have from time to time seen with regret indications of a contrary feeling on the part of some of the head masters of our great schools ; but it is a wholly mistaken feeling. There is no need for the clashing of interests between the colleges and the schools. I admit that there is a slight clashing at present, for this reason : Wales at the present time is a battleground of two systems of education—a system of education for the London University and a system of education for the Universities of Oxford and Cambridge. I can see no solution, no means of bringing the schools of Wales and the colleges into harmony, except by the foundation of a Welsh University—a University which will enable the schools, without a double system, to prepare their boys at once for Oxford and Cambridge and for the colleges in Wales.

The Departmental Committee had advised the provision of two colleges for Wales, and either the removal of that at Aberystwyth to serve North Wales or its abolition ; but a fortnight after the first Session opened at Cardiff, the question of the continued maintenance of the College at Aberystwyth was under consideration.

Its existence and its record of work were considerable factors in the determination of the Government to endow two colleges, one in North and one in South Wales. It had subsisted without Government support,<sup>1</sup> and it was considered that, as colleges established in the north and south would best meet the convenience of the population of Wales, Aberystwyth College could not be needed. It is almost needless to say that the suggested removal of the University College of Wales from Aberystwyth did not take place. The University College for North Wales was opened at Bangor in 1884, when the annual grant of £4000 made to the College at Aberystwyth in 1882 was transferred to it, and to the University College at Aberystwyth a grant of only £2500 was made; but the full grant was restored to Aberystwyth in 1885.

Viriamu Jones rejoiced that with the opening of the College at Cardiff the numbers of the students at Aberystwyth had increased. He believed, too, that if the Government saw that people used the three colleges, it would still continue its help to Aberystwyth. Both Lord Aberdare and Mr. Mundella wrote to him on the subject. Lord Aberdare wrote on November 7, 1883 :

It is an interesting fact that the numbers at Aberystwyth, sixty-five, are eleven more than they were in 1880. If the opening of the Bangor College is tolerably successful and does not—as I fear it will—sensibly affect Aberystwyth, that may be a good reason for retaining it.

Mr. Mundella consulted him in December 1883 :

What do you say to the outcry about Aberystwyth? Would not a third College be mischievous?

Can you do nothing to satisfy the Welsh Nonconformists that their apprehensions are unreasonable and groundless?

I wish Bangor were as well launched as Cardiff is. The sectarian bitterness is very painful; it would almost seem as though, instead of conferring a blessing on Wales, one had thrown the apple of discord in its midst. It is a poor reward for all one's labours and efforts.

On January 6, 1884, Lord Aberdare wrote again :

I am much obliged to you for the opportunity of reading

your letter to Mr. Mundella, with which I entirely agree—your views about Aberystwyth entirely accord with mine.

I wonder the Welsh are not ashamed of their contemptible opposition to Cardiff and Bangor. They would have it appear that the two most populous and stirring towns in North and South Wales are disqualified to be sites of Colleges because there is a Cathedral in one of them and near the other. Nationality is not without its merits, but they are sadly, perhaps inevitably, marred by provincial pettiness.

From the beginning the financial position of the College was far from satisfactory. In fact, a member of the Council, on calling at the Principal's home to welcome him to Cardiff, observed that he expected the College would be bankrupt in three years if the Principal's projects were seriously entertained.

The Government grant of £4000 a year did not meet the expenditure required for the maintenance of the staff and the increase of its numbers, for the provision of scholarships and exhibitions, and for the charges for premises and their upkeep. There was thus need of a larger income to meet present requirements; and besides these, other departments were required, especially those of engineering and medicine. The number of students also made increased accommodation imperative: this was not to be had conveniently near or designed for the purpose in hand, therefore a building fund and a fund to purchase a site had to be raised. As the students' fees paid but a proportion of the cost of tuition, the very success of the College, in point of the number of its students, increased its financial difficulties.

It was part of Viriamu Jones' task to strive to obtain funds for these five purposes. There were special meetings of the Council, deputations, appeals to the wealthy and to the workers, and the help of the Welsh members was sought. In fact, as early as 1887 the finances of the College would have seemed desperate to anyone less courageous and determined than the Principal, especially as, except Lord Aberdare, and later Mr. Louis Tylor,<sup>1</sup> the Hon. Treasurer, most of the Council members were too busy to give time to

<sup>1</sup> Louis Tylor, brother of E. B. Tylor, D.C.L., LL.D., F.R.S., and Hon. Treasurer of the College from 1894-9. Author of *Chess: a Masque*.



collecting funds ; even the Finance Committee might leave the getting in of promised sums of money to the Principal.

The academic staff cheerfully accepted the large elementary classes necessary to prepare students for the matriculation examination ; the undermanned office constantly worked overtime without complaint—only they and the Principal knew how heavy was the strain.

The Principal had to limit his evening practical class to nine students and to hold it twice, instead of once, a week, owing to lack of room in the workshop. On this point, Mr. Samuel Harrison (now of Messrs. Harrison & Co., Ripon), whose work from the time of his appointment in March 1884 as assistant in the Physical Laboratory was most valuable, writes :

A converted horse-shed in the grounds of the College building provided the Principal with a Physical Laboratory and workshop furnished with a gas engine and dynamo, a small foot lathe, and a wood-working bench.

In the first Long Vacation electrical resistance boxes, electrical keys and commutators, a simple pendulum, a torsion balance, apparatus for Young's Modulus, a wooden model to illustrate cubical expansion by heat, apparatus to illustrate Archimedes' Law, and a mercury cistern to show the working of Boyle's Law, were turned out in the Laboratory, and later two large wooden coils were added, carefully measured and wound so that their principal electrical constants could be calculated, and could be used for experiments both in self and mutual induction.

There was no lime-light lantern for the popular lectures ; an ordinary lantern was fitted up for both horizontal and vertical projection. Frequently I was borrowed from the Principal as lantern operator by the other Professors who had similar peripatetic duties to perform, and though we often had narrow shaves owing to our want of equipment, our popular experiments never failed to go off.

Our workshop was always full of work in progress, and the Lecture Room and Laboratory crowded ; the Junior Class overflowed the Physical Lecture Room and had to be held in another Lecture Room, entailing quick fitting up and removal of apparatus for the next class in another subject. No serious original work could be attempted—no room was available.

In this, the first year of the College, Viriamu Jones' advice was asked by the Rev. Herber Evans, the Chairman



of the meeting of the Brecon Memorial College which decided in 1884 to send its students to the University College for the Arts course. It was this decision he hoped for from all the denominations in South Wales as his letter shows:

I was very glad to receive your letter, and to find from it that our denomination is anxious as to the part it is to play with regard to Higher Education in Wales. I hope it will be a prominent part, taken with a liberal unsectarianism and a cordial co-operation with those differing from us in religious opinions.

I am exceedingly interested in one denominational aspect of our work, the education of candidates for the Nonconformist Ministry. By the foundation of the College a great opportunity is given to Nonconformity of elevating its intellectual tone. We have been complaining for a long time that we have been deprived of educational advantages. We now have them, and a good use of them is the only thing that can justify our past complaints.

I am glad to hear that Brecon College is to send us its Junior Students for their Arts Course. It is setting a good example to the other Theological Colleges of Wales.<sup>1</sup>

The question of residence forces itself on our attention; I wish a Hall could be opened for the students.

You know that a prominent pulpit here is vacant through the lamentable death of Mr. Waite. I should like to see it filled by a *strong* man, who would also be head of the Hall for Independent Students and *Professor* at a renovated Carmarthen College moved to Cardiff. Such a combination would in my opinion exercise a most important influence on the future history of Congregationalism in Wales.

The large number of Scholarships and Exhibitions offered by us makes it highly probable that many may be secured by students of Brecon and other Colleges. There are altogether one hundred exhibitions (of £11 1s.) covering all class fees; and in addition scholarships that are awarded according to a scheme that will involve the College in an expenditure of £730 per annum; so that provision is being made to the extent of nearly £2000 per annum for Scholarships and Exhibitions.

Our great effort here has been to make the Staff as perfect as possible so as to provide at our small fee an education second to none in all departments.

<sup>1</sup> In this session requests came from the Baptist Theological College and the Calvinistic Methodists of South Wales to the Council of University College for the provision of teaching for their students who were training for the ministry.

You will readily understand that we are in great want of funds. Your action at Bangor in the matter of scholarships is startling and makes us feel that South Wales must be up and doing.

I hope the time has come for the Independents to contest the palm with the Calvinistic Methodists in the matter of Higher Education here. It is a noble race and one in which the denominations need not fear to strive.

In these first two Sessions Viriamu Jones became deeply impressed with the need of good secondary schools in Wales, and of legislation to secure such schools. He worked on into the vacation in the summer of 1885, and in July made a preliminary report to the Council on the progress of the College, and on the following day left Cardiff for a short holiday in Cornwall, where he met other members of the staff.

Professor W. P. Ker writes :

The days at the Lizard are what I remember best. Among other things V's unreasonableness (supported by Thompson) in taking me out in the evening for what I thought difficult and dangerous explorations about the cliffs. Why did they haul me up the Gull Rock when they might have left me comfortably below ? Why did they want to go up themselves ? I am not sorry now, but I still think it was rash work.

Viriamu Jones spoke at the Cardiff Proprietary School in July 1885. He was concerned to promote mutual understanding between the different educational institutions :

This school, he said, is the only school in Cardiff on a public or semi-public basis. There is a very satisfactory side to the report ; and I only wish more schools in Wales would emulate this school in sending boys in for the London Matriculation examination. The school is thoroughly efficient, yet the number attending it is only 86. It is a reproach to Cardiff that there is no marked increase in the number of boys attending intermediate schools. In the middle of a population of 100,000 an efficient school of this sort ought to be attended by a far greater number of boys. The people of Cardiff seem to pay small heed to the efforts that have been made in giving them a thoroughly good school. It may be said that the fees of the school are too high. That may be in part true ; the Council are taking that matter into consideration. But people must not be unreasonable.

A good education cannot be given without expenditure, and the expenditure cannot be maintained unless people are content to pay the requisite fees. But we must look deeper for the real cause of the starvation of intermediate schools in the town. Here is this great prospering town, and yet two hundred make up the whole number that attend all the intermediate schools ! The people whose children ought to be at the intermediate schools are content, I think, with their being at the elementary schools or the higher-grade school. But the higher-grade school is, after all, merely elementary. That lack of intellectual ambition, shown not only by the small numbers in attendance at the schools, but also by the early age at which they were taken away, is to be deplored and to be remedied. Some people deprecate the interference of the Government in intermediate education. In the present state of things I do not. I am exceedingly sorry that the present unhappy circumstances politically—that is, as affecting the Intermediate Education Bill—have prevented its becoming law this Session ; but I hope soon to see so good a measure passed. As to the future of intermediate education in Cardiff, I believe that Cardiff is aiming at something better, and that there will be shortly at that school not eighty or ninety, but four hundred or five hundred boys !

After a short absence he returned at the end of August 1885 to go on the wettest day imaginable to the Eisteddfod at Aberdare. It was an immense gathering, ten thousand people in the temporary pavilion and twenty thousand standing, under a deluge of rain, in the sodden fields outside, waiting their turn to enter and sing in the choirs. Inside they were hardly better off. Those on the platform indeed could manage to avoid some of the perpetual drip from the canvas roof, but the audience sat on plank seats with their feet on mud, and this did not increase their enjoyment.

Matthew Arnold had been invited to address the meeting, but he could not be heard in that huge pavilion and the audience became restive. Archdeacon Griffiths, starting to his feet, brandished a gamp-like umbrella, and sonorously pronouncing the Welsh numerals up to ten, and bellowing out that he wished he had a dozen good Cardis [men of Cardigan] to thrash them for their discourtesy to their English guest, twice produced breathless silence, but unhappily Matthew Arnold, though he seized his opportunities, could not make his voice carry and had to give his speech

to the printers. All who remembered his championship of the 'Celtic fringe' were woefully disappointed, but the incident did not prevent his whole-hearted enjoyment of the singing of the Welsh choirs.

Viriamu Jones promised to speak at the meeting of the Cymmrodorion section of the Eisteddfod on University local examinations, and used the opportunity for explaining the need of a University for Wales.

He had a very broken summer vacation, spending the fortnight mentioned in Cornwall between the July meeting of the Council and the function at the Boys' School; and another fortnight after the Eisteddfod meeting, in and near Bangor and at the British Association meetings in Aberdeen.

In the Session of 1885-6 Professor Powel, having collected a large share of the money needed, the College acquired the Glan Aber and Border library, the well-known and valuable collection of Mr. E. R. G. Salesbury of Chester (1819-90), a descendant of William Salesbury, joint translator into Welsh of the New Testament and the Book of Common Prayer.

It is a comprehensive collection of Welsh books, relating to Wales and the four Border counties, especially Cheshire, published between 1508 (the date of the first edition of Geoffrey of Monmouth) and 1862, and includes manuscripts and original records and a very full series of Welsh Bibles, prayer books and hymn books, also nearly all the Welsh dictionaries and grammars in various editions. It contains besides a large number of the Acts of Parliament dealing with the Principality.

The expenditure of time, money and patient research involved in the formation of this library is only paralleled in the history of Welsh bibliography by the labours of Owain Myfyr.

With the autumn of 1885 again began Viriamu Jones' numerous activities, and besides the usual routine of administration, teaching, and planning to gather funds, it was necessary for him to undertake meetings and speeches to urge the Government to introduce a Welsh Intermediate

Education Bill in its next Session. It was at this time that the Council decided against the institution of a written entrance examination owing to the unpreparedness of candidates seeking admission to the College. In January 1886 the Principal wrote to Dean Vaughan :

I must not conceal my regret about the Entrance Examination—but time will make us bolder. Meanwhile it is not easy to explain to those who write to me what their standard of attainment is to be before they can be admitted, nor to convince the Senate that the Council was wise in preferring an undefined viva voce to a definitely planned written examination. I only say this to explain how it was that I so unwillingly came to differ from an opinion of yours. You will believe that I am always shaken when (I am thankful to think of the rarity of the occasion) your opinion is different to my own ; and always console myself when your opinion passes into act with the thought that your views and reasoning are more likely to be correct than my own.

Still the Intermediate Education Bill delayed ; but this delay, vexatious and disappointing as it was, only brought home the more to Viriamu Jones the need for a University.

With the friends and colleagues and in the circumstances set forth above Viriamu Jones began his work in Cardiff ; difficulties and prejudices were to be overcome, different points of view to be reconciled, and opponents won to confidence in the College and its leaders. The story of the College is a record of unsparing efforts, often, but by no means always, rewarded by success, which repeats itself without variation other than that of increasing volume : circumstances or opportunity demanding more labour sometimes in one province, sometimes in another.



## CHAPTER V

### THE COLLEGE, 1883-1901

I think the history of Wales during the past twenty years is a history of little else but its educational development, and I believe it the more because the desire of the people for education is founded upon an idea that will prevail. I believe the imagination of the people has been touched by the fire of the true and the only democratic ideal—the ideal of a community in which every man is a cultivated gentleman and every woman an educated lady.—*Viriamu Jones* (from an address at Abertillery, 1894).

EARLY in 1895 Lord Aberdare, the oldest friend of the College and its sponsor, just before his eighty-first birthday said that the success of the College had been extraordinary. Not only had the Council and Senate successfully performed their task, but what they had done had exceeded the anticipation of even the most sanguine among them. He continued: ‘Wales has hitherto had a poor chance, but now every man has his opportunity. The number of men who, through the education at this and other colleges in Wales, have come to the front in a short time is quite extraordinary; and if Wales has not done justice to her natural abilities and genius in the past, it is because no opportunities have been given her.’

When Lord Aberdare’s term of office as President came to an end in 1888, Lord Bute consented to be nominated, and his election gave great satisfaction. His character and personality were well known and esteemed; his great scholarship added distinction to any academic office, and, as he had great possessions in the mining district of South Wales and Cardiff, friends of the College entertained the hope of special benefits to it from this official connection. When Lord Bute addressed the students in 1890, Principal

Jones spoke of his coming as 'a matter of very real rejoicing, of pleasure without alloy.'

It is true that in the curriculum of so modern an institution as the College there was little to attract or interest a man imbued with the classical traditions, though on one occasion he met Professor Roberts in the College Library and talked with him in modern Greek. He was, however, extremely anxious to discharge his duties as President in the best possible way, and frequently sent for the Principal to talk over points in connection with them. These visits were regarded by Viriamu Jones as a rare privilege and inspiration.

It was hoped that Lord Bute, when his term as President had expired, would retain his connection with the College by acting as its representative on the Welsh University Court, but he wrote :

I received some days ago the intimation of the honour which University College has done me in electing me as one of its representatives on the Welsh University Court, and your own remarks on the subject. I told Mr. Anderson to express to Mr. Ivor James my thanks for the compliment and my regret that I dared not accept it, as I could not well hope to be able to fulfil the duties. Then I delayed the sending of the letter that I might reconsider the matter. But the result of reconsideration is simply to confirm me as to the propriety of that at which I had first arrived.

The fact is, one University Court is quite enough. The duties of that of St. Andrew's are such as to control my places of abode, a matter which is very serious to a man like me, with several properties and many interests, let alone any questions like journeys for health or legitimate recreation : they entail many and frequent journeys ; and the correspondence alone is such as not only seriously to interfere with other letters, but practically to preclude me from working at literary matters which I would fain be busy with. I cannot double all this—even did I not remember that the work would be more than doubled, since the journeys from and to some place (still undetermined) in Wales, and perhaps fluctuating, would be longer, and the matters very arduous, and certainly very contentious, since the question is that of floating a new institution instead of merely carrying on an old one. If I failed to do all this, I should fail in my duty to University College and to the Welsh University at its most important moment. I dare not and cannot undertake

it. You must get somebody else who can and will. I suppose it will fall to you to propose Mr. Gladstone as Chancellor.

To this letter Viriamu Jones replied on March 23 :

You will know from what I have said on other occasions how deep and sincere my regret will be if you are unable to give us your assistance in the difficult task that awaits us in relation to the new University organisation. I have even gone so far as to claim your help. But it would be wrong in me, in face of what you say of the arduous duties you have undertaken at St. Andrew's and of the serious demand they make on your time, not to recognise the difficulty of your undertaking at present duties as onerous in connection with the University of Wales.

But the clause of our University Charter dealing with the election of Representatives by the Courts of Governors of the Colleges runs thus : ' Four persons by the Court of Governors of each of the Colleges hereinafter declared constituent Colleges of the University one of which said four persons shall be the President of each such college respectively unless such President shall then already be Chancellor of the University.'

The Crown has therefore assumed in the Charter that the Presidents of the Colleges will consent to act as Members of the Court of the University of which those Colleges are constituent.

Unfortunately for us (I fear your Lordship may not feel it to be so) the term of your occupancy of the office of President is in October next. It is I think understood that your Lordship would then be nominated by the Crown to be its representative upon the University Court.

But meantime I hope you will consent to act on the University Court as our President, and reserve your decision as to the course to be taken in October.

During the term of his association with the College, Lord Bute became Mayor of Cardiff. Unlike his father who, when he lived at Cardiff Castle, walked its streets as a neighbour and fellow-townsmen, the Marquess was personally little known ; for though it was popularly said that the town had outdone itself in its festival of rejoicing when he came of age, the announcement of his conversion to the Roman Catholic Church shortly afterwards had strained the affection of the Cardiff townspeople, who were mainly Nonconformists. In spite of this there was a universal desire to know him better, and the town was glad and grateful when he consented to accept the Mayoralty.

By a curious coincidence twice an accident befell his mayoral banquets. On the first occasion all preparations were complete, when the sudden death of a relative put a stop to the banquet ; but the patients of the Infirmary benefited and ate the mayoral dinner.

The second banquet, in the Drill Hall, was indeed eaten by the guests, and the clatter of knives and dishes had scarcely ceased when, at the very moment for the toasts and speeches to begin, a slight hissing sound was heard. Viriamu Jones, who was seated by his host, perceived that one of the electric wires connecting the lamps introduced in lighting the hall for the evening's entertainment had fused. The wires were not only not insulated, but the paper decorations were twined round them : these instantly caught fire. Lord Bute rose at once to give the signal for his guests to disperse. The whole roof within was already a sheet of flames. Some of the guests, including those members of the College staff who were present, organised themselves as firemen ; there was no panic, no one was injured, and the pictures which had been brought from the Castle for the occasion to decorate the walls of the Drill Hall were saved.

An important development of the social life of the students was the founding of the University College Settlement on the East Moors, the neighbourhood in which the five thousand workmen of the Dowlais Iron Works were living.

Canon Barnett came, in April 1895, to address the Students Union on the part they might play in bridging the gulf between the educated and uneducated classes. 'University Colleges,' he said, 'with their "settlements" among the workers were making an effort to bridge this gulf, by helping men to improve their minds, to develop their powers of being and enjoying, and by fitting the two classes to be the better servants one of another.'

University Settlements, already started in London and America, were demonstrating their value ; other large towns in England were following their example, and he hoped that the future might see one in Cardiff.

The College students greeted the idea with enthusiasm ;



they collected subscriptions to the amount of £100 a year, the Settlement was opened, and Professor Burrows with his wife went to live at East Moors. Both threw themselves wholeheartedly into the work till Professor Burrows was appointed Principal of King's College.

As the Settlement Clubs increased in numbers and importance so that a big meeting-place was needed, Lord Tredegar, with his usual generous interest and sympathy in this as in every other activity of the College, gave a free site for a hall.

The lasting success of a college does not, however, depend upon the work of individuals, nor even upon the intellectual achievements of its teachers and students, but upon the spirit animating its whole corporate life. Such a spirit of self-sacrifice and high endeavour, far-reaching in its beneficence, inspired the first great servants of the College.

At the last meeting of the Governors of the College which Viriamu Jones attended there was a discussion upon the teaching of Welsh history—some Governors thought that too small a place was given to it. There was hardly a text-book then published but 'The Welsh People,' by Rhys and Brynmôr Jones; and that one book could afford no means of training students in the methods of historical research, which could be best attained by working on periods of history already treated by authorities. Thus trained, they would be able to write the then unwritten history of Wales.

Courses in Welsh history were early included in the University syllabus, and Cardiff college introduced it as an essential part of its annual history course. Professor Little also gave some popular lectures on Welsh history in Cardiff.

The liberty of choice in the arts subjects enabled Welsh to be taken as an optional language by candidates for a degree; latterly a large number of students have taken Welsh, and the University of Wales has done more than any other institution for the study of the language.

A further point of interest should be mentioned in relation to the College. Cardiff is situated within Glamorgan-



shire, but only three miles from the boundary of Monmouthshire; the neighbourhood of the collieries and consequent commercial attractions have brought large numbers of English people. Owing to this, Cardiff has borne the reproach of being more cosmopolitan than Welsh and of thereby presenting certain disadvantages for the seat of a National College.<sup>1</sup> But the nationality of the students gives no indication that this has been a general view. The percentage of students, other than Welsh, was, during the years 1885-98, only from six to eight per cent. of the total.

In the succeeding pages an attempt is made to indicate the steps leading to the fulfilment of the work of the College up to the beginning of the year 1901.

The most important problem to be considered in relation to the Principal's work at Cardiff was that of the education of women, the greatest in its scope and in its influence on the future. In theory it was not new to him.

*The Education of Women.*—The vision Viriamu Jones worked to realise was that of a community 'in which every man is a cultivated gentleman and every woman an educated lady. 'This,' he said, 'is the only true democratic ideal.' He gave vigorous support to all attempts to place women educationally on an equal footing with men. Such attempts were, perhaps, easier of achievement in Wales than in England, for the fact that Welsh girls did not receive as good an education as boys was due rather to poverty than to intention and tradition. An instance of the prominent part taken by Welsh women in the Welsh educational movement is provided in the association which was formed at a meeting held at Cardiff in 1887, at which Viriamu Jones presided. The objects of the association, as formulated by Miss Dilys Davies (now Mrs. Glynne Jones), were: (1) to diffuse knowledge as to what constitutes a good school and college education for girls and to point out the best means of securing it under the special conditions of life in Wales;

<sup>1</sup> 'Cosmopolitan' as it may be, at the present time, the Cardiff Education Committee is spending on the teaching of Welsh about £2500 per annum.

(2) to collect information as to the present condition of education for girls in the various districts of the Principality ;  
(3) to watch over the interests of the girls in any future legislation affecting education and in the rearrangement of Welsh educational endowments.

Viriamu Jones wrote in December 1880, thirty-four years ago, when the movement for the education of women could count but few supporters among men :

I have never read the ' Subjection of Women.' You know I don't need to, because I believe they should be men's equals. You heard me even advocate giving them votes . . . and I am of opinion that the University of London is right in giving them all their degrees and treating them in examination just like men.

But he left no record of his views as to the ideal education for a woman. He felt the pressing present need was to abolish the conventional limitations imposed on women's aims and activities, to avoid differentiation between men and women in the provision of educational opportunities, especially in the development of the system of Welsh education which he hoped would provide for women equally with men.

The University College at Cardiff was, from the beginning, open to women on the same terms as to men, and in the very first year the highest scholarship was awarded to a woman-student. The Hon. Mrs. Champion Russell, who often discussed the subject of the education of women and girls with him in 1885 and 1886 writes, on this point :

Though from the College point of view men and women must be treated alike, he had it much at heart to make the life less wearing for the women-students, especially for young girls fresh from home or school. He felt life in lodgings to be undesirable for them, and he encouraged the proposal of a hostel in every possible way. He had, then, I think, a lurking feeling that as a rule women should not be driven along the same intellectual lines as men, that their true purpose in life was often to ' égayer ' the world of workers, not to throw away the talent of happiness for the sake of work the average man might do as well. Still he would have every facility given them for gaining the knowledge they desired, was always ready to give woman her due, and would on no account have her debarred from any profession

for which she might prove fit. In his recognition of excellence he knew no distinction of sex.

Miss Kate Hurlbatt, Principal of Aberdare Hall, Cardiff, said of him that :

He inspired those who worked with him by his confident outlook on the future of women's education. He realised the defects that had been bred in women by the disabilities under which they had suffered, and challenged them to self-criticism and courageous enterprise in self-development, to cheerful venture into new spheres, to the conquest of new worlds. His quick instinct for the woman's as well as the man's point of view made him an effective and wise guide in the co-educational movement.

For example, when the Training Departments for Elementary and Secondary Teachers were established at the College, Viriamu Jones succeeded in placing a woman at the head of the Women's Elementary and Secondary Training Departments, a new departure at that time.

Some years later, when the Lecturer on Education on the men's side was made a Professor, Mrs. Mackenzie, the Lecturer on Education on the women's side, received the same title.

Aberdare Hall, the hostel for women-students, owed much to Lady Aberdare. It was she who formed the committee for building the new hall and gave constant care and untiring attention to every detail of its development. She was its President, and in March 1892 wrote :

What I feel so very strongly is in organising this Committee which makes a fresh departure in the management of this large branch of work, that it should be so started that it should be a permanent Body suited to cope with any changes which may arise in the future.

I have been thinking very much lately of some wise words of Miss Florence Nightingale uttered more than thirty years ago: 'No public work ought to depend upon one person's character or influence, and no one ought to consider their work successful unless they can so organise it that it can go on as well without them as with them.' Miss Nightingale acted upon that view, and it is, I believe, one reason why the great nursing system originated by her has spread with a continuous success throughout the land. I should like to feel that the new Aberdare Hall which will spring from the ashes of its humble little predecessor should stand upon a firm basis and not be dependent for success upon the supervision or exertions of any one

individual. This can only be done by a strong Committee, strong in the sense of being composed of members who will be really interested in the work and will be prepared to give both thought and attention to its details.

One of the marked peculiarities of the Cardiff College and of her sister Colleges in Wales [Lord Aberdare said in a speech in 1895] is the extraordinary extent to which women's education has grown. Nobody can have any conception of the influence that women's education must exercise on the future population of Wales.

And Viriamu Jones said in 1893, speaking at the Welsh National Banquet :

Our University is unique in the position it assigns to women. In this respect also it has been arranged to meet the desires and aspirations of the Welsh people, who are signally interested in the education of women. At all our Colleges<sup>1</sup> women and men attend the same classes. A properly trained and educated woman is fit to take her place side by side with man in intellectual things and to be his mate in the prosecution of all the departments of human knowledge.

When the constitution of the University was drawn up in 1893 a clause was inserted to the effect that 'women shall be eligible equally with men for admittance to any degree which the University is, by this our Charter, authorised to confer. Every office hereby created in the University, and the membership of every authority hereby constituted shall be open to women equally with men.' In this connection it is of interest that the first graduate by examination of the Welsh University was a woman-student of the Cardiff College.<sup>2</sup> Viriamu Jones was anxious, too, to see the 'ladder of learning' complete for girls as well as for boys from the elementary schools up through higher grade and intermediate schools to the University. In a speech at Radnor Road School, Cardiff, he said :

Nothing is more noticeable in the educational world during the last thirty years than the increased attention paid to the

<sup>1</sup> In 1883 there were 15 women and 87 men students at Cardiff.

" 1887	"	41	"	104	"	"
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" 1897	"	163	"	258	"	"
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" 1901	"	262	"	366	"	"
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<sup>2</sup> Miss Maria Dawson, who received the degree of B.Sc.



education of women in our elementary and intermediate schools and in the Colleges and Universities. It is part of a greater movement, in order to find the basis for which we must go back into the history of Christendom. That development of the education of women is, in my opinion, but a rendering explicit of the position assigned to women in the teaching of Christ Jesus.

After ten years' work with women-students his views were not less emphatic : experience confirmed them. In 1893, on the question of women's franchise, he said :

Is it not a principle lying as fundamental in our system of parliamentary government that every member of the community possessed of certain property qualifications, sane, well-behaved, of mature years and capable of forming or being taught to form an intelligent opinion on public affairs, should have a constitutional method of expressing that opinion by vote, and that it is to the interest of the State that the aggregate opinion so expressed should determine our legislation and control our executive ?

Let us take that principle as the major premise of a syllogism ; the minor premise is this : there are women who fulfil all these conditions—the conditions embodied under Registration Acts, women who are sane, well-behaved, and capable of forming an intelligent opinion on public affairs.

The conclusion is, therefore, these women are entitled to a vote.

If I were a politician I should not dare to make a syllogism. I know they are anathema in English public life, and that it is almost libel to call a man a political theorist : and that a leaning to abstract doctrine is something heavier than a mill-stone round the neck of an aspiring statesman. But these considerations do not affect us this afternoon, so I have ventured on the syllogism, for it is an epitome of most of the arguments in favour of women's suffrage ; and the reasoning is cogent enough to shift the burden of proof on to those who object to giving women the suffrage. The objector must find fault with one or other of the premises.

He must say that either women do not fulfil the conditions, or that even if they do it is contrary to the nature of things or inexpedient in the interests of the State (which is the same thing) that the term ' members of this community ' should be interpreted as including women.

Do women fulfil the conditions ? The only condition with which we need deal is that of fitness to form or capacity for being taught to form intelligent opinions on public affairs.



The objector may maintain, and many do maintain, in nicest language in the presence of women as intelligent as themselves strangely enough acquiescing in the dictum, that women are not reasonable. Either it is said that women have insight but cannot reason out a thing ; or that they walk by faith ; or some other smooth utterance is made to gild the pill presented for their acceptance. But the gravamen of the charge is the same, however choice the language, and it means simply this, that women are not reasonable creatures. My experience leads me to meet this statement with absolute and unqualified denial. I have for twelve years been connected with colleges in which men students and women students are taught in the same classes, and I have been convinced by my experience of their work that the human intellect cannot be divided into male and female—that the man's mind and the woman's mind are made alike ; and the woman is made to be man's equal in intellectual pursuits—and that, properly trained, she is fitted to shine side by side with man in all departments of human knowledge. . . .

I pass to the second possible objection—the objection that it is contrary to the nature of things for women to be citizens. This may be called the doctrine of the sphere.

In the House of Commons last year, Mr. Asquith said : ' I have heard this measure recommended in the name of democracy. But it is not a democratic measure. The doctrine of democracy demands that we should equalise where inequality exists among things fundamentally alike, but not that we should identify where things are fundamentally unlike. The inequalities which democracy requires that we should fight against and remove are the unearned privileges and the artificial distinctions which men have made and which man can unmake. They are not those indelible differences of faculty and function by which Nature herself has given diversity and richness to human society.'

From which I gather that Mr. Asquith thinks that men and women are fundamentally unlike and that they are distinguished by indelible differences of faculty and function by Nature herself. We gratefully acknowledge that he has made Nature feminine while appealing to Nature as arbiter in a question of national import.

Well, now, are men and women fundamentally unlike ? That there is an indelible difference of function we acknowledge : but is it germane to our present discussion ? And for the appeal to Nature as arbiter, it reminds me of the story of the advocate who said : ' It is written, my Lord, in the book of Nature that . . . ' and was stopped by the question of the judge, ' I beg your pardon, in what place ? '

The fallacy of assuming that unlikeness for certain purposes means 'unlikeness for others quite different is a common one in the art of debate. Let me parody Mr. Asquith's argument.

Men and women are by nature fundamentally unlike : therefore, if men are mathematicians, women are not to be mathematicians ; men and women are by nature fundamentally unlike : therefore, if men are cooks, women ought not to be cooks ; men and women are by nature fundamentally unlike : therefore, if men write books, women ought not to write books. Each one of these propositions is as unreasonable as Mr. Asquith's when he says men and women are by nature fundamentally unlike : therefore, if men vote at parliamentary elections, women ought not to vote at them.

The fallacy, in respect of the particular question of the relation of women to political duty, is nearly as old as human thought—it is laughed at and riddled with destructive bullets in the Republic of Plato, and yet it is still playing its part in its old undiluted unreasonableness in the ablest speech made against women's suffrage in the House of Commons last year. Let us have done with it and bury it without any sort of ceremony.

We are now face to face with narrower issues. On what grounds is it not expedient ? The grounds given by Mr. Asquith are :

- (1) Women don't ask for it.
- (2) The sanction of the law is ultimately physical force.
- (3) Women have no grievances.
- (4) There is no experience to guide us.

(Mr. Bryce with singular generosity said, ' This is an experiment so large and bold that it ought to be tried by some other country first.')

' The honourable gentleman opposite,' said Mr. Asquith, ' has spoken with contempt of the argument derived from physical forces. But in the last resort, not living in an ideal state of things, the sanction of the law is force ; and the law which rests on the opinion of a majority of voices but which cannot summon to its aid, in case of difficulty and danger, the active assistance of the physical force of the country, is a law which is made to be broken, and for the performance of which there is no practical adequate security.'

The only meaning to be assigned to the physical force argument is with reference to civil war. But is the issue of war determined by physical force ? Is this the language of the inheritors of the traditions of Agincourt ? Does moral force, high courage not count in the achievement of victory ? And would not the women of England play their part or exert high influence in the determination of the issue of the strife, ' for England, Home and Duty ' ?

Christianity has once for all secured the recognition of the moral individuality of woman. She stands as a person before God responsible for all her acts.

In England she has achieved her legal personality. She can

hold property, enter into contracts, and perform all the duties of a legal person.

But we still withhold from her political individuality, the right of citizenship. We do it unjustly, to her detriment and the detriment of the whole community. So long as we do it, one side of her nature is prevented from growing and can bear no fruit. We do her injury as an individual whether she is conscious of it or not. But she does not and cannot suffer alone. And so, checked and stunted, unsympathising with men in many of the things that interest them most keenly, taking no part in discussion with them of some of the most vital questions of the time, she is the worse mate, the less perfect mother, the poorer friend : and the political and social organism suffers.

It was in the spirit of the foregoing views that Viriamu Jones dealt with all questions affecting the position of the women-students as the various developments of the work of the College took place.

*Technical Education.*—In 1894 Viriamu Jones gave an address on Technical Education at Abertillery. He said :

Why should you take advantage of the opportunities afforded in this town ? There are four reasons—two material, one moral, and one religious. One material point is that, if you wish to get on in the world, education will help you to do it. Show me a young man of good character who is making every use of his opportunities of intellectual culture, and I will show you a man who, in years to come, will be prosperous in the community in which he dwells.

It is your duty in the strenuous competition between foreign countries and your own to make every effort to keep pace with them in your knowledge of the scientific principles upon which your manufacturing, mining, and other industries are based. We have not in England spent nearly the money we should have spent upon intermediate and higher education.

Another reason is that you cannot discharge your duties as citizens except as educated men and women. You live in a democratic age, an age of equality of rights for all men, equality of opportunity for all men. These are the phrases of the platform and the texts of many a speech. They are sinking deeper and deeper into the minds of the community and embodying themselves more and more in the legislation of the country. But side by side with the birth of this great ideal there has grown a sort of universalisation of the idea of intellectual competence. Every man now—such is the democratic supposition—has the right to argue, to express himself, to be heard on the platform through the Press, through books—in any way in which he chooses

to express himself. Everybody is in theory a citizen of the Republic of Letters. But mark the danger in such a position, and what are the risks? Never in the history of the world were such opportunities of propagating error. There is no opinion so wild that some people in all ranks of society will not hold it; none that some able journalistic supporters cannot be found to favour. You have a right to express yourselves, to have your own opinions, but with it is the responsibility corresponding to that right. It is your duty to see that opinions are well founded, and to become educated people in order that you may make good use of your privileges. Then, as young men, you will be able to do your duty as citizens and take part against the propagation of false opinion which will be harmful to us as a nation unless such competent knowledge is brought to bear as will enable you to form well-grounded, rational opinions.

To those of you who are students, the distinguishing work of a scholar is a reverence for all true knowledge. In so far as you have that reverence you are scholars; but more, you are partakers of the Divine nature. The thought of God is progressively manifesting itself in the advancing current of human knowledge; and if you would be scholars, sharers of the Divine nature, children of the light, you must be in this living current and conscious of its flow.

Viriamu Jones was anxious that all sections of manual workers should understand the importance of technical training.

During the winter of 1886 he gave lectures on Electric Light in the Queen's Hall, Cardiff, at which artisans formed a large part of the audience. Requests for one or more lectures came to the College from the Royal Institution and also the Free Library at Swansea, from the Reading Institution of 700 members at Blaina, from the Literary and Scientific Society at Ebbw Vale, from Merthyr Tydfil, Pontypridd, Caerphilly, Newport, from the miners' delegates at Brynamman, from the Treharris, Merthyr, and Clydach colliers, and many more in South Wales.

An appeal came also from the editor of the local Liberal paper for a copy of a lecture he gave on 'Faraday' for the 'working-class readers,' and with it friendly advice:

If you will pardon the comment, I am afraid you professors at the College hide your light too much under a bushel. You appeal to a mere handful of students while the great world outside the College walls is thirsting for knowledge.



The artisans were quick to appreciate the relation of theory to practice, and their faith in the usefulness of the College grew. The Principal was asked to speak on education to a demonstration of Cardiff Trade Unionists at the end of July of the same year. In April 1887 the Cardiff Lodge of the United Operative Plumbers Association of Great Britain and Ireland asked him for help to establish an examining centre in Cardiff for such of their members as wished to become enrolled on the Register of the Worshipful Company of Plumbers : saying that they remembered ' your remarks and the interest you manifested towards the artisan class in your recent lectures.' In the autumn of 1890 the plumbers of Cardiff decided to promote a scheme for the National Registration of Plumbers ; they asked permission to hold a meeting in the College, and requested him to propose their first resolution. Lord Aberdare was asked by Principal Jones to preside at this meeting. He replied : ' Nothing can exceed my ignorance of the question of Registration of Plumbers. Natheless I consent to preside on November 15, but I reckon upon you to inform my vacant mind.'

In 1889 Mr. Thomas Davis, a representative of the Trades Council, and also a member of the Amalgamated Society of Engineers, were elected members of the College Council. Signs, too, were not wanting that the interest of the country was being aroused.

The Technical Instruction Act was passed in 1889, and the Local Taxation Act in 1890. Under the Technical Instruction Act County Councils were allowed, but not compelled, to levy a rate not exceeding one penny in the pound. A great number of the Welsh counties (Monmouthshire being included as part of the Welsh education area) levied a rate under this Act. The Local Taxation Act made provision for the payment to County Councils of something like three-quarters of a million per annum, obtained from the excise and spirit duties and commonly called the ' Goschen ' Fund, with the proviso that the County Councils might utilise the fund for educational purposes. All the Welsh counties devoted their share of this fund to educational objects.



This legislation was the Principal's opportunity. If the sums produced by the Local Taxation Act, 1890, were added to the income raised by the counties under the Technical Instruction Act, 1889, there would be a substantial income available.

Although he was already overburdened with other work, he immediately began to plan. He saw that by co-operation with the College the counties would be able to give efficient teaching on a comprehensive scale ; and some of the counties on their side were eager to co-operate. In December 1889 the Cardiff Technical Instruction Committee was appointed and sent a deputation to the Council of the College 'to ascertain if and upon what terms the College would undertake to provide accommodation for technical schools and the Science and Art Schools at present carried on by the Free Library Committee ; also upon what terms they would undertake the necessary instruction ; also to formulate a scheme as to what instruction should be provided under the Act.'

In Glamorganshire and Monmouthshire the County Councils at once appointed their Technical Instruction Committees, and the Committees met forthwith. The Glamorganshire County Council decided to divide the local taxation grant received from the Treasury between intermediate and technical education.

Viriamu Jones' plan was ready when, on December 2, 1890, he was asked to lay proposals before the Joint Committee of Glamorgan. He said

that, in order to make technical instruction in the county satisfactory, there should be in every large centre of population a thoroughly good science and art school ; and that such schools should be established and in working order not later than the following September, so that the students could be presented at the next May examinations of the Science and Art Department. Under these circumstances, the Joint Committee might consider the propriety of assisting classes already in existence. It would be essential to have one resident master at each place so as to keep the school together, represent it in the locality, and, of course, take a considerable portion of the teaching. It would, however, be impossible for each school to support a thoroughly qualified staff ; and, therefore, his proposal—which would be economical—was to have a staff

of travelling teachers, each member taking a school each evening and thus covering six schools per week. In this connection the College Council proposed to represent to the County Council that it would be advantageous for such a staff of lecturers to be under the control of the University College and appointed by the College. This arrangement would conduce to economy and better teaching than if the County Council appointed the lecturers. But an arrangement might be made with the County Council by which the College should receive as a grant the amount which would otherwise be expended by the county authorities in maintaining a staff. Another proposal of the College would be that the brightest or most successful students at such schools should receive a higher education, more especially in the principles of mining, at the College. Already workmen's committees in the mining districts had subscribed such scholarships. He was anxious that what he said should be taken to apply equally to Glamorganshire and Monmouthshire; and he trusted that both counties would combine for the purpose of establishing a thoroughly equipped school of mines at Cardiff. The general professorships were already founded, and should the proposals of the College be adopted by the County Council, it would only be necessary to appoint the professors or lecturers for special subjects, including metallurgy and geology. The College Council had already entered into an arrangement with the Cardiff County Council similar to that which they sought to make with this County Council for carrying on the work under the Technical Instruction Act, and Cardiff borough students would be under the control of the College from September next. His idea as to the number of classes to be established was that there should be one at every colliery at which there were sufficient students to form a class. At that stage, however, the College did not ask for any fixed sum; what was desired was that the principle propounded should be accepted by the County Council, and then the estimates could be prepared. A properly prepared contract had been entered into with Cardiff. He estimated that the County Council would have nearly £12,000 per year to work upon, including the Treasury grants, the penny technical instruction rate, and the halfpenny intermediate education rate.

At the same time, he urged, it would be more economical to establish technical faculties or departments at the University College than to start a new college *de novo*. The faculties most needed were a School of Mines and a Metallurgical department. Their artisans were ambitious in this matter, and during the past year had by weekly and monthly contributions established a number of scholarships in order to bring forward students from the collieries to the University College.

The question of instruction in agriculture was also worth the consideration of the County Council. In the Vale of Glamorgan it would be essential to establish an agricultural school.

Viriamu Jones wrote to influential persons asking for their support for this scheme. Mr. W. T. Lewis (afterwards Lord Merthyr of Senghennydd) who, as Lord Bute's agent, was connected with large colliery interests, entirely agreed with the Glamorganshire scheme, and wrote :

I have for years advocated the establishment of good night schools through our districts, for the purpose of enabling boys to continue their education and improve themselves while they are learning their trades, etc., instead of, as unfortunately is the case in many instances, spending their evenings in public-houses, and forgetting a great deal of what they were taught in school.

Speaking in January 1891, Lord Aberdare alluded to the co-operation of the town of Cardiff, which had enabled the College to undertake the whole work of technical education on a very extended scale, and also the work till then done by the science and art schools.

. . . If the plan which has recently been evolved by our indefatigable Principal is accomplished, as he firmly believes it will be, we shall have ambulatory teachers from the College at Cardiff carrying light and knowledge into every district in Wales where there is a technical school. In a very short time the College has done a very great work, with the promise—a certain promise—of doing much greater.

In February 1891, Viriamu Jones reported to the Court of Governors that the suggested agreement had been made between the Council of the College and the Technical Instruction Committee of Cardiff.

There were something like 700 or 800 evening students at the College in the classes established under that agreement.

Viriamu Jones was now elected vice-chairman of the Technical Instruction Committee of Monmouthshire ; and in the same month meetings were organised throughout Glamorganshire to explain the provisions of the Technical Instruction Act.

Two scholarships had been provided, at the beginning of Session 1890, by funds collected in the colliery district of

Mardy; and now other collieries entered into correspondence with the Principal with a view to establishing similar mining scholarships.

Still hoping that the Glamorganshire County Council would decide to work with the College for technical education and contribute to the development of the Engineering School, a deputation went to meet them in April 1891.

On March 30 Lord Aberdare agreed to join this deputation—‘a meet way of celebrating my 77th birthday.’

In July of that same year Sir Hussey Vivian then chairman of the Glamorganshire Federated Trust Company, who was convinced of the industrial value of technical education, asked Viriamu Jones to confer with him in Cardiff, and requested that copies of the scheme for the Monmouthshire County Council should be sent to the members of the Glamorganshire County Council.

On August 5 the Monmouthshire County Council received the first report of its Technical Instruction Committee, and the scheme was accepted for consideration. The Newport newspaper then was strongly opposed to the scheme, and one of the chairman’s (Mr. Grove) self-imposed duties was the correction of its misrepresentations. He wrote in indignation to Viriamu Jones: ‘Why should this tiresome scribbler go thus out of his way to put these words in our last evening’s paper? I cannot understand it, and am trying to counteract it all I can!’

On September 10 the Principal wrote to his wife:

I am in the thick of work, but refreshed by last week’s holiday and happy in the perfect weather.

Yesterday afternoon the Registrar came up to tea, and I walked with him to Walnut Tree. The hills were at their loveliest, with the bracken burnt brown, illuminated by the evening sun.

His note refers to the single week’s rest that he had during this summer. The old malady now often attacked him, and he suffered from insomnia. The problem of securing the efficient administration of the Technical Instruction Act had involved a serious addition to his work. Some members of the Cardiff County Council, keenly alive to their responsi-



bility as keepers of the public purse, and well aware of the financial position of the College, had also felt distrust of educational experts. The Principal's proposals, therefore, although accepted at once by Mr. T. Hurry Riches, chairman of the Technical Instruction Committee of Cardiff, and other enthusiasts, had not at first met with general approval. When, for instance, after numerous and lengthy consultations, the draft agreement between the Council of the College and the County Council of Cardiff was near completion, a hitch occurred. The terms of the proposed agreement needed a finer adjustment to the balance of interests involved. It was then that Viriamu Jones walked alone after nightfall, on fourteen successive evenings, in the cemetery on the North Road, and sought and found the needed word. Both parties were satisfied, and the agreement was sealed and ratified.

By this agreement the College Council, in return for certain annual payments by the County Council of Cardiff, undertook the provision of evening classes in technical and commercial subjects at the College and the direction of the Science and Art Schools. Thus the most efficient teaching, with the greatest economy, was secured to the town by the co-operation of the educational authorities.

At the same time negotiations were still in progress with the other counties, which in some cases only ended in October of 1892.

Mr. Edwin Grove, wrote on October 20, 1891 : ' Personally I feel that a very little will put our agreement into a satisfactory condition.' Referring to the first lecture in mining to be given in Newport under the Act of 1889 by Professor Galloway,<sup>1</sup> he asked the Principal to introduce the lecture, and hoped that a representative of the Glamorgan County Council would also speak. ' If this is all *well reported*, would it not do much good and make the new departure widely known ? But probably in the inmost recesses of that mind of yours some such thoughts have already been working.' A few days later another letter announced that there had

<sup>1</sup> Professor William Galloway, F.G.S., Author of *The Coal-dust Theory of Great Colliery Explosions*.

been a 'battle royal' at the committee meeting, but that the agreement would be sealed for a year. In the following March, Mr. Grove entreated the Principal to come and talk over a scheme for agricultural education, as to which he anticipated some disagreement. 'You are,' he urged, 'of a more gentle spirit than myself.'

When the Governors of the College assembled as usual in the second week of October 1891, the Principal was too ill to meet them. The work Viriamu Jones accomplished in a day was phenomenal in amount; but early in November attacks of agonising pain put a stop to all work. A three months' holiday on the Continent was advised, though travelling was but a fresh stimulus. He went by sea to Naples, where his wife and Dr. W. A. Wills, travelling overland, joined him.

Yet in February of 1892 he was back again at work. On the Nile he had received a letter from his friend Mr. Ivor James, the Registrar:

We are jogging along, but it is strange to be here without you, and I do not think I could ever comfortably settle down in your continued absence. I could almost wish you might be here for the next council meeting. The affairs of the Victoria University, with a strong protest from Manchester, the Charity Commissioners' Cardiff Intermediate Scheme, and a variety of other questions of more or less importance will be considered at that meeting, and your presence and voice would be of great service. The objections to the Charity Commissioners' Scheme—if any—must be lodged with the Commissioners before February 24th.

On the receipt of this letter, Viriamu Jones returned to Cardiff, better, but by no means cured.

Technical classes were now established throughout South Wales and Monmouthshire, and it remained to develop and maintain them. By the agreements Glamorganshire contributed £1000 a year, Monmouth £600, Cardiff £600, while the College undertook to establish a department of metallurgy, a school of mines, and also a number of free studentships.

Naturally, at first things did not always go quite smoothly. For instance, attention was called by a member of the

teaching staff at Cardiff to certain questions of organisation which needed improvement : students would join the classes for a month only ; others, including many of the most promising, undertook too many subjects and consequently became discouraged ; and on their side the teachers were hampered by having to do their work without proper apparatus.

But although at this period the Principal had to attend the meetings of the technical instruction committees of two counties and was giving advice and help as to the provision of technical instruction for the borough of Swansea, a long series of letters show with what patient kindness he devoted himself to the removal of small causes of friction and misunderstanding in relation to the travelling teachers.

Carmarthenshire also claimed his help, and decided to enter into an alliance with the College, paying a certain sum annually for scholarships at Cardiff, to be held by students educated in Carmarthenshire.

When the reports of the technical instruction classes were issued in 1895, they showed that in the five years since the arrangement between the College and the Technical Instruction Committee was completed, the number of students had increased five times. From the Glamorganshire technical classes two of the students who won scholarships at the College were colliers and one an engine-fitter.

Applications had been received for lecturers on mining from Aberdare, Ystrad, Porth, Merthyr, Ystalyfera, Tondy, and Pontlottyn ; on chemistry from Pontypridd, Ystrad Rhondda, Bridgend, Aberavon, and Tondy ; on mechanical engineering from Barry, Treharris, Gowerton, Ferndale, Llwynpia, and Mountain Ash.

The colliers attended well, showing the greatest interest and perseverance. Three lecturers worked hard in Monmouth, visiting at least nineteen centres.

Quarrymen in North Wales have been known to tramp sixteen miles after the day's work to learn mathematics, and now colliers, in South Wales, many of sixty years of age, trudged to lectures on geology and mining, the men in

both cases having but a slender acquaintance with the English language in which the teaching was given.

The following is an authentic story of two brothers, colliers, both students at the Cardiff University College.

Both wanted to win County Council scholarships. The elder, David, who had worked as a miner since he was twelve years old, kept his brother Tom out of the coal-pit and maintained him for the nine months during which they both prepared for the scholarship examination. Tom passed successfully, but David, probably owing to his self-denying efforts, failed; Tom, however, when he came home from college in the vacation, donned his brother's working clothes and went down into the pit to work in David's place, thus giving his brother ten weeks to prepare again for the examination which, this time, David was able to pass.

By February 1895 the Cardiff Technical School was giving instruction in upwards of fifty different subjects of science and art, and had 2600 students whose work was annually tested by Government examiners. The scholarships ranged from £2 to £125. They had an income of a little over £5000 per year to devote to purposes of technical education.

The Technical Instruction Act was also the opportunity for reforming the teaching of domestic economy, and particularly of cookery. Suggestions for the establishment of a School of Cookery for South Wales and Monmouthshire were drawn up, in which it was urged that :

In the radical changes which have taken place in the national ideas on education during the present century, it is surprising that the utilitarian school have not given more notice to the question of cookery as the fundamental art on which the human race is dependent. Some explanation, however, can be found in the fact that, to a large extent, knowledge in this art has in the past been handed down from mother to daughter.

Under modern conditions, when an ever-increasing number of women were becoming wage-earners,

the mothers, even if capable of imparting the necessary knowledge, have no time to give to the attainment of such knowledge ; with the result that when the girls marry and the necessity of



preparing meals for themselves and others is forced upon them, they are ignorant of the simplest rules of the art and, except by a series of expensive experiments, have no means of learning it.

School Boards had gradually, though somewhat tardily, recognised this, and in large towns had erected kitchens and employed skilled teachers to give practical instructions to the scholars. In this direction, Scotland and England were the pioneers; and Wales, during the last few years, had also taken the matter up by appointing teachers in some of its chief towns. But Wales stood quite alone in its lack of a centre where cookery diplomas could be obtained; and the School Boards of Wales were, therefore, dependent upon the English and Scottish training centres for their supply of cookery teachers, so that Welshwomen had to go to Liverpool or London in order to obtain the necessary instruction and certificates. For over twenty years cookery had been taught in elementary schools and a grant paid without the Education Department having any inspection either of the elementary classes or training schools. So long as the children in elementary schools had forty hours' instruction (twenty of which was to be practical) and the teacher held a certificate from a cookery training school, the teacher was free to give any instruction she pleased, and one teacher could take twenty-four children for practice at one time. The training schools, also, were under no inspection, and each school had its own standards and held its own examinations without any reference to the Education Department.

The Training School of Cookery and the Domestic Arts for Wales and Monmouthshire was opened in April 1891 in connection with the University College at Cardiff, but there was no properly thought-out scheme of cookery teaching for the elementary schools and no insistence upon any systematic training for the teachers. In 1894, the Vice-Presidents and Committee of the Cardiff School convened a Conference in London for promoting two reforms in the teaching of cooking: firstly, to secure a reasonable and practical cookery syllabus for elementary schools, technical schools, and technical instruction classes for women and girls throughout the country; secondly, to obtain some

guarantee that a cookery teacher should have had training in cooking and in the teaching of it.

Reports recorded the making of meringues and lobster salad in a large Board School of one of the northern manufacturing towns, and that rock-cakes were often the staple dish for instruction in the day and evening classes. There was then no systematic teaching (practical or theoretical) of the properties, cost, uses, and preparation of food ; indeed Mrs. Davies,<sup>1</sup> the first chief Inspectress said :

At one class which came under my notice I found that a girl (teacher in an elementary school), whose ignorance and want of intelligence was such that she bought scrag end of mutton to make *beefsteak pie*, obtained a week after, from one of the Training Schools, a certificate enabling her to teach cookery and earn a grant !

Resolutions were passed by the Conference, and, at the end of the meetings, Viriamu Jones proposed a motion, which was carried, to the effect that ' a Memorial be sent to the Education Department asking that grants should be made to cookery schools on the same lines as are now made to colleges for the training of elementary teachers.'

The Conference also declared its opinion that no person ought to receive a diploma recognised by the Education Department as entitling the holder to teach cookery in elementary and other schools, except after a full year's course of instruction in a school for the training of cookery teachers approved by the Education Department for that purpose, and examination in theory and practice by an independent board of examiners appointed by the Department.

In speaking to the second resolution,<sup>2</sup> Principal Jones said :

We represent to-day a number of cookery schools recognised by the Department who fear that the regulations of the Code as

<sup>1</sup> Then Miss Harrison.

<sup>2</sup> 'That the cookery classes in continuation and elementary schools should be required, as a condition of receiving any grant of public money from the Government, to work on syllabuses especially adapted to the circumstances of the working classes and to the needs of the different localities, and approved by the Education Department.'

interpreted by a number of other such schools in the kingdom are likely to do great damage to the teaching of cookery.

We are of opinion that had teaching in cookery is worse than none at all—and we are here to ask you to consider whether the regulations at present in force are such as to enable the Department and the public to feel confident that the teaching given in our schools is thorough and efficient.

As a result of this Conference the Permanent Executive Committee were asked to meet Sir George Kekewich at Westminster in 1895, and its suggestions were accepted and incorporated in the Code.

It was the Cardiff school which took the lead in getting up conferences and also deputations to the Education Department to urge the necessity of reforms, and it was owing to their efforts that the time of training for teachers was lengthened, a check put on the careless granting of certificates to elementary teachers, and the training schools generally put under inspection.

Mrs. Davies writes of Viriamu Jones' part in this movement :

Looking back and realising the tremendous demands he had on his time, it seems wonderful that he was able to give so much attention to the formation of the Domestic Economy School. And the interest he took was everything to the success of the work.

Many people who looked upon these regulations as but a first step in the establishment of a better national standard of women's work in the home and economies of food, health, and life, hoped for more help from the County Councils. Mrs. L. C. Davies wrote to the Principal, expressing the wish of many educationists :

Can you not persuade the County Councils to give a sum of money to establish a Technical College for women in which all the Domestic Arts could be taught by experts? I am attacking the Norfolk County Council about the same kind of thing. *They* have £9000 to spend and, beyond a few village cookery classes, the money is all being spent upon men.

But for the time no further grants-in-aid were made for women's technical education. Miss Hester Davies, head of

the school since its foundation, reported in 1902, after ten years, that

the Training Department began by giving instruction in one subject, and ten years later it trained teachers in Cookery, Laundry-work, Dressmaking, and Housewifery, and gave classes also in four other subjects. The number of its students increased from 136 to 502 in nine years.

Classes for women were also organised in the counties. The subjects given were cookery, and, in the agricultural districts, instruction in butter-making. Wherever possible the teachers of cookery used the same kind of stove or range, the same kind and number of saucepans or cooking pots, as were used in the neighbourhood in which the lessons were given. There were cheering stories of this teaching—one from a place where the lesson had been on Irish stew made from the scrag end of mutton, for when at the end of the week the housewives went to purchase meat, the butchers were in despair so large was the demand for scrag end and scrag end only. Report said—and it was the best comment on the teaching given—that the ‘County Council’ butter obtained the highest price in the local market.



## CHAPTER VI

### THE COLLEGE, 1883-1901 (*continued*)

*Training of Teachers.*—In 1883 the provision for the education of elementary teachers throughout England and Wales was very inadequate. Existing training colleges were merely disconnected units, and the outlook of the teachers they trained was apt to be narrow and over-specialised.

In this, as in other departments of education, Viriamu Jones worked for a unity of organisation which should give greater breadth and diversity in the training. He considered it essential that elementary teachers should have the advantages of a University education and that the training colleges should be linked with the Universities. The problem first confronted him at Sheffield, and in his short time there he succeeded in bringing some of the elementary school teachers into touch with higher education by means of evening classes at Firth College. At Cardiff, the teachers themselves asked for special classes, and as a result classes were held for students preparing for the Matriculation examination of the University of London. The Council also, as an experiment, established a Saturday morning class in mathematics, but the number in attendance was not very great. Viriamu Jones considered that relations could be established between the College from its national side, as a University institution, and the teaching profession. He had a very strong opinion that the next great improvement in elementary education throughout England and Wales should be the bringing together of the teachers and the University institutions of the country.

His plan was to induce the Government to create a number of Queen's Scholarships tenable at the Cardiff University College. These were annual Government grants to pupil-teachers and subsequently to men and women-students who were preparing to qualify as teachers in the elementary schools. The holders of these scholarships were to receive special instruction in pedagogy and other subjects not then taught at the College, and were to take literature, languages, mathematics, and science in common with the University students. This suggestion received the approval of Lord Aberdare, who wrote in 1885 :

I like your plan of having the College accepted by the Government in substitution of the Training College, and see much in it that would be acceptable at least to a Liberal Government, who are sometimes sore pressed by objections as to the denominational character of the great majority of the training colleges.

The movement for bringing teachers into touch with the English Universities dates back to 1853, when Owens College, Manchester, first started lectures in Classics and Mathematics for schoolmasters of National and British schools. In 1863 Matthew Arnold, in his general Report for that year, recommended making University examinations and degrees accessible to teachers in elementary schools in England as in Scotland.

Scotland, as usual, led the way. But, although it gave a general education, it did not, as yet, provide any training in pedagogy. Hence the development of the normal training schools independently of the Universities. In 1873, however, the Scotch Education Department sanctioned the attendance of Queen's scholars from the training colleges at classes on Arts or Science at a Scotch University. But it was not until 1888 that the establishment of Day Training Colleges in connection with the Universities was definitely recommended by the Royal Commission on the working of the Elementary Education Act of 1870 in England and Wales.

The history of the next stages in the movement can best be told in Viriamu Jones' own words taken from his address to the Cymmrodorion Society in 1887 :

There seem to be three possible methods of dealing with the question in Wales.

I. What may be called the Scotch system—upon which the Training College gives a complete education in itself, both general and technical ; but is established in a University town so as to permit of the attendance at the University classes of a certain select number of students. In a large centre of population like Cardiff it would probably be advantageous that such a Training College should be a Day Training College, or that at any rate students able to live with their parents and friends should be allowed to do so.

The Birmingham School Board, in December 1885, memorialised the Committee of the Privy Council on Education in favour of this plan. The memorial concludes : ‘ Your memorialists believe that the only solution of these difficulties is the establishment of day training colleges in England with generous Government aid, such as is granted to the non-residential colleges in Scotland. Your memorialists, therefore, respectfully ask that the system of non-residential colleges, which is permitted by the Scotch Code, should be introduced into England, and that Government grants in aid of such institutions should be given on an equally liberal scale ; and, further, that School Boards be empowered to establish and maintain such day or non-residential training colleges.’

II. A second plan would be that the University College should take over altogether and wholly the general education of the students, and that the technical training in the theory and practice of education should be provided for by an independent Training College. This would be an arrangement similar to that to which we are tending in the case of theological colleges. But there does not seem to be in the case of the training of teachers the same reason for this division as in theological training ; and hence the disadvantage of the unnecessarily divided authority may be held to weigh against such a middle course as this.

III. The third method is to make the training of teachers a department of the work of the University College. This is the solution which has, from the time I first considered the matter, most commended itself to me. My thoughts were first drawn to the question in the preparation of addresses to the elementary teachers of the Cardiff and Newport district in the autumn of 1885, and I made proposals for establishing Queen’s Scholarships at the University Colleges of Wales.

The proposal I made was warmly taken up by the Cardiff School Board at the instance of their chairman, Mr. Lewis Williams ; and in April 1886, the Board resolved to memorialise the Department to found a number of Queen’s Scholarships

for training elementary teachers; and pledged itself, in case the Department acceded to the request, to give opportunity in the schools of the town for the acquisition of practical experience in school management and teaching.

As a consequence of this memorial, Mr. Williams was requested to give evidence on the scheme before the Royal Commission at present considering the working of the Elementary Education Act; and this he did in March last, fortified by a resolution of the College Council approving strongly of the proposals made. Subsequently it was with genuine pleasure that we discovered that the same line of thought had been present at the same time, or soon after, to other persons engaged in the work of education. In May of this year I received an invitation to join a deputation of the Education Reform League to the Vice-President of the Council, to advocate a scheme in connection with the English Universities and University Colleges, in all essentials identical with the proposals we had been maturing in Cardiff. The deputation, supported by many representatives of the Universities and the Colleges and also by many well-tried and distinguished friends of education, presented its case through Professor Stuart and other speakers. The answer of Sir W. Hart Dyke was a foregone conclusion, having regard to the fact that the Education Commission is still sitting and investigating, among other things, the best methods of training teachers. We were told that nothing can be done till the Commission has made its report, but that our arguments will have due weight attached to them when the Government comes to consider the action that is to be taken after its presentation. Now, before leaving this point, let us examine a little more carefully what the scheme really means and how it works out.

Our proposal is that the University Colleges should be put by the Code in the same position as Training Colleges as regards the reception of grants for the training of elementary teachers, provided that satisfactory arrangements are made for instruction in the theory and practice of teaching, by the appointment of the requisite additional staff, and the provision of the necessary opportunities of practical teaching. Putting aside for a moment the consideration of practical professional instruction, let us consider of what nature the general education ought to be. Ought we not to make it of a more advanced character than has hitherto been the case at the Training College? It is difficult to see considerable advantage in our proposals, unless the change is to be coincident with an education on a higher level—an education more nearly akin in its non-technical part to that given to masters and mistresses in secondary schools. But if this is to be so, it will involve a set of examinations different from the certificate examinations at present provided by the



Department. This no doubt introduces a new difficulty, but not by any means an insurmountable one. It must be admitted that the present Departmental examinations would not be the most suitable that could be devised for teachers trained at the University Colleges; and it would be necessary to ask the Department to regard as a substitute for it the certificate of the College obtained by the candidate after fulfilling a prescribed course of study, or, better still, the certificate of the three colleges combined for purposes of examination. But what is this combination of colleges? What, but University organisation. It naturally implies the formation of the Welsh University. It would not be right, at any rate at first, to make it necessary for the elementary teacher to take his degree, though that might come. But either part of the degree examination or a sufficient separate examination, specially instituted by the University, might be regarded as satisfactory. We have then a prescribed course of study at the University College with the attainment of a certain University certificate as an alternative for the present Training College general course, and the passing of the Departmental general examination.

What I have been saying refers to the general training of the teachers. We contemplate also technical training in the theory and practice of teaching in a special department of the colleges. And the establishment of such a department has this advantage, that it would be useful also in the training of secondary or intermediate teachers. There would thus be opportunity of at once liberalising the education of elementary teachers and at the same time adding technical knowledge and training to the education at present received by students preparing to be teachers in secondary schools. The examination of the attainments of the elementary teachers in this technical part of their work would probably be most advantageously undertaken by the Department and Her Majesty's Inspectors.

We propose, therefore, that instruction, both general and technical, should be given at the University Colleges, and that the examination should be divided—the University giving the certificates of general attainments, while the Education Department itself determines on the technical knowledge and skill possessed by the candidates.

It will be noticed that this method of bringing the colleges into relation with elementary teachers leads us straight to the necessity of founding the Welsh University at the earliest opportunity; and this happens not only with this question but with almost every other that comes under consideration in connection with Welsh education at the present time. I should have been glad to enter into more detail about this subject of the training of elementary teachers, but time is wanting. I have, I trust, said



enough to indicate the nature of the solution in my view desirable ; and I hope that subsequent speakers will deal with the question in order that, if possible, something like a clear opinion may emerge. I claim for the method I have indicated that it is easy to apply, that it is economical, and that it would mark a distinct advance in the education of teachers ; for there is a breadth in University education which a professional college must always fail to touch, however excellent be its teaching. We have, further this collateral advantage that the scheme successfully carried out binds closer together the higher education and the elementary education of the country. The University becomes a familiar thought to the elementary teacher, and, therefore, also to boys and girls in the elementary school.

In 1888 the Royal Commission unanimously recommended the establishment of Day Training Colleges in connection with the Universities, and in 1890 Viriamu Jones' suggestions were adopted in Cardiff by the College in conjunction with the School Board.<sup>1</sup> Not very long after this the Senate of the Victoria University, Manchester, and the London Education Reform League, which largely represented teachers, petitioned the Vice-President of the Council for an almost identical scheme. Mr. Barnett, who worked with Viriamu Jones at Sheffield, wrote in 1914 :

I saw little of him and his until I began to inspect Training Colleges, and then my duties took me frequently and joyfully to Cardiff. He had many irons in the fire, but he was as clear and keen about the affairs of the Elementary Training Department of the College as about every other side of its life. In my conferences with the College Council I could recognise the same extraordinarily just and subtle intellect that I knew of old. He wanted good elementary teachers ; he also wanted good University students ; and he could always show how the two *desiderata* could be combined. He had a curious power of placing himself at the point of view which might not have been expected but was necessary for a just determination of the case under discussion.

*The Engineering School.*—In 1883, less than two months after the opening of the College, Viriamu Jones, hearing from Sir Philip Magnus that the City and Guilds Institute of London could not help in the establishment of a depart-

<sup>1</sup> In 1891 there were thirty-one Queen's Scholars at Cardiff ; the Government subsequently increased this number to 100.

ment for the scientific study of engineering, appealed to the National Association for the Promotion of Technical Education to bring prominently before the townspeople the urgent need of such a school, and a public meeting was even held at the Town Hall which was addressed by speakers from the Association. But there was no immediate result. A further grant of money from the Government was really needed, but there seemed little hope of obtaining it.<sup>1</sup> In March 1884, Lord Aberdare wrote :

It would be utterly useless to attempt to get a larger grant than £4000 a year, well as we could employ it. The necessity for such an increased grant must be demonstrated later, and after the experience of some years.

Yet, two years later; it was decided to make an appeal to the Government for a grant for both a Medical and an Engineering Chair.

On April 14, 1886, a Deputation waited upon Lord Spencer, Lord President of the Council. It is significant that, besides the President (Lord Aberdare), the Vice-President, and other members of the Council, it included over fifty representatives of the medical profession and of the engineers in South Wales.

Lord Aberdare, introducing the Deputation, showed how obviously an engineering school would benefit South Wales when he mentioned that 90,000 skilled workmen were employed in the local collieries, in iron and steel works, superintended by 4000 agents and overlookers. A considerable proportion of the latter had to go to the Continent to acquire part of their technical and scientific, i.e. their professional education.

He also dealt with Sir Lyon Playfair's remarks to the Deputation on the precedent followed by the Government in helping Scotland where they had expected the locality to raise an amount equal to that given by the Treasury,

<sup>1</sup> It was plain that, apart from the needs of the building fund, another £1600 a year was required : £400 a year (the interest on £10,000 at first offered for a site) was promised by the Corporation of Cardiff and £15,000 (or some £600 a year) by the Trustees of the Craddock Wells Charity. The former sum was paid after opposition in the House of Lords, and the latter was delayed by local party differences until 1889.

asking for due consideration of the fact that Wales had raised £70,000 for the new Colleges of Bangor and Cardiff, £60,000 for Aberystwyth, the greater part of the £12,000 for which Lampeter had appealed to the country, and during the last twenty-five years £60,000 or £70,000 for theological colleges. Citing the gifts made for University building purposes to Scotland (£400,000 in the last twenty years to Edinburgh and £100,000 to the other Scottish Universities) he asked that these precedents might be followed in the case of Wales—since, if she were left to private beneficence in a time of unparalleled commercial depression, he foresaw a long delay before the new departments so important to the whole Principality could be established.

A private letter informed Viriamu Jones that his appeal had failed in part :

The Education Department have decided not to ask the Treasury to assist in promoting the Medical Chair projected for your College. They have, however, decided to ask the Treasury to contribute towards the maintenance of two Professorships for Mining and Civil Engineering—I think to the extent of about £400 a year for the two. I am stating this on good authority, so far as the main facts are concerned, but I am not at all sure about the figures just given.

Viriamu Jones followed up the Deputation by a letter to Lord Spencer, in which he stated the case for the two departments and asked for a grant of £2000 a year, pointing out the precedent of Edinburgh both as to annual grants and annual sums of money for the maintenance and repair of the University buildings.

On May 14, 1886, Lord Aberdare wrote again :

Your letter is excellent and timely. We are suffering from an application now before the Government from the Victoria University. They know not how far such grants may lead them and are, therefore, much hesitating.

Through May and June the Principal lobbied for this appeal; Sir Edward J. Reed, the member for Cardiff, and other Welsh members did their best to make known the necessities of South Wales and of the College. On June 9, 1886, 'The

majority against the Government is surprising,' wrote Viriamu Jones, 'will they resign or dissolve? and (so local are our thoughts) will they make the required grant for medicine and engineering to us first or not?'

But the Government were powerless to make a grant.

Mr. Gladstone introduced his Home Rule Bill; his followers could not follow; with the fall of his Government fell the hopes of immediate help for education in Wales.

Meantime, the Principal contrived to open a fairly complete fitting-shop, so that students intending to be engineers might, while pursuing their theoretical studies in mathematics, physics, and chemistry, acquire a considerable use of tools. He considered it the best way the College could take of laying a strong hold on engineering apprentices who have only their wages at their disposal—who would, under these circumstances, when their college course was complete, be in a condition to profit more directly from the wider opportunities afforded in the manufacturing workshop. They would have learned habits of accuracy, and, further, have had experience in designing, making patterns, casting, and fitting in the case of small apparatus. They would not enter the works as mere novices, likely to waste one or two years before learning to feel their way among the tools around them.

He was already unable to accommodate the practical class chiefly engaged in making electrical apparatus, as students were much more readily attracted to the workshop than to evening lectures.

Disappointed in his application to the Government, the Principal appealed three years later, in person, to the Drapers Company which gave a welcome promise of support, which was followed up in Wales itself, as a letter from Lord Aberdare on May 6, 1889, shows:

Fearful of effect of premature publication, I tore up a telegram giving particulars and sent you a diplomatic one.

Your news of Lord Bute's intentions most cheering. With Drapers' contributions, Lewis Davies' £1000, and Lord Bute's supplement, we ought to be able to start an efficient Chair. Do not divulgate news—trust them to only a few trustworthy ears.



On May 11, 1889, he wrote again :

I am very glad to find that the Drapers' letter confirms the news I sent you. It seems to me as wise as it is liberal, and that the conditions they affix to their grant (that the locality should raise an equal amount), so far from being onerous, are calculated to excite liberality in others, and enable us to do our work handsomely and thoroughly.

The Drapers Company offered a gift of £1000 and £300 a year on the condition that the locality also contributed £1000. In a year's time this sum and subscriptions amounting to over £900 a year for over five years had been collected ; and in October 1890, nearly seven years after the Principal's first appeal to Sir Philip Magnus, the Engineering Department was opened with Dr. Elliott, of Edinburgh, as Professor, and Mr. Pullen as Assistant Lecturer.

It rapidly outgrew its premises, and, on October 21, 1892, the Principal wrote :

I have been several hours to-day surveying the ground for the new ' wooden shanties ' for the Engineering Department.

A few days afterwards (November 2) the Council of the College decided, in conjunction with the associated counties, to erect a lecture-room, boiler-house, etc. When the formal opening took place during the Session 1893-4, the Principal celebrated the event by organising another deputation to the Drapers Company to ask their help in regard to the buildings ; and mainly through their generosity it was possible by February of 1895 to complete two-thirds of the buildings of the Engineering Department. The testing-house and large workshop were ready ; the boiler-house had still to be built, but had to wait till the temporary chemical laboratory could be removed and so set free the area needed. For general purposes several freehold houses had been bought from Lord Tredegar in 1892-5.

The Department obtained the co-operation of the Engineers Institute, and very soon became the centre of engineering education in Wales. Dr. Elliott, a man of great energy and original power, not only distinguished himself in the field of research, but was also a very fine teacher ; and his ability

and thoroughness won for his pupils a great reputation : they were much sought after by engineering firms throughout the country.

Soon after his appointment a fellow engineer inquired about the staff and the work of the Engineering School at Cardiff, and, on receiving the information, replied to Dr. Elliott : ' What you tell me must either be a gross exaggeration, or you must all be working up to a standard impossible for any man's strength and health.' Professor Elliott, however, worked for the College at the sacrifice of health and, ultimately, of his life. He could not but give of his best. Till within two or three weeks of the end, he lectured to and taught his classes, refusing the invitation to take holiday and rest, as he judged that it would disturb the work of his students to replace his teaching shortly before examinations. His death in 1912 was a great loss to the College.

*The Medical School.*—In 1886 a deputation waited, without success, upon the Government to appeal for the endowment of a Medical Chair at the College. It was then said that a medical, even more than an engineering, school was needed, as there was no facility of any kind in Wales for medical education, and of the 1686 doctors who practised in Wales over 300 had been educated in Scotland.

The Principal consequently had to look elsewhere for funds. It was estimated that £15,000 was required for the foundation of the school and that the school would probably attract 100 students. A subscription list was opened and a committee formed, with Miss Caroline Williams and Dr. Isambard Owen as secretaries, to ask for the help of Welsh members of the profession in London. The doctors of South Wales co-operated : in Cardiff Dr. Edwards helped, and Dr. Price promised £1000 if another £1000 were given. In Swansea and Newport also great interest in the project was shown by the doctors, among whom was Sir Garrod Thomas.

An impetus was given to the movement by the meeting of the South Wales branch of the British Medical Association in 1890, when the chairman gave £1000 towards the fund. Viriamu Jones, at this meeting, pointed out that there had

been for a number of years a prejudice against provincial medical schools. This was due to the fact that men trained entirely in provincial schools were inclined to be of narrow view, and necessarily had less hospital experience than those who had been trained in great cities like London and Glasgow. In a great many schools they were unable to support chairs of anatomy and physiology with professors devoting the whole of their time to these important subjects, but in the present case these objections would be obviated by establishing chairs so endowed as to make it worth a man's while to devote himself entirely to teaching those subjects.

In 1892, £4000 had been collected ; and in 1894, when the school which had been started in the previous year was formally opened, the fund amounted to £6000. There was still no site, no near prospect of a college building. The College work was being carried on in the basement of the Unitarian Chapel, in two houses in the terrace adjacent to the College, in the buildings of the former Proprietary School, in St. Andrew's Crescent, in St. Andrew's Place, in the temporary buildings and wooden sheds on the grounds round the College, and in that building. This sum of £4000, by careful economy, provided an extra storey to the College, including an anatomical theatre, physiological laboratory, and other necessary rooms. There Professor Haycraft and Professor A. W. Hughes began work in 1893, and there the Medical School was opened in 1894.

Before very long a combined conference of the local government committees for administering the Inland Sanitary Survey and Technical Instruction Act met to discuss the establishment of a Public Health Department at University College, under a local officer of health. It was decided to open the department and to invite the co-operation of the County Councils of the boroughs of Cardiff, Swansea, Newport, and also of the County of Monmouthshire ; the College was becoming closely bound up with the life of the people.

The Medical School was soon placed on a firm footing in respect of teaching and students ; but its income, barely

enough for the moment, sorely needed prospective future addition.

In its material equipment the Department of Anatomy was more fortunate than that of Physiology—for when Professor Hughes left Cardiff in 1897 and removed his own anatomical collection, he generously gave £350 with which to purchase specimens as a nucleus for an Anatomical Museum at the Cardiff School of Medicine. On his death, in 1900, his friends subscribed £1655 for the maintenance and development of this museum, and also founded a Memorial Medal, designed by Mr. Goscombe John, to be awarded in the class of anatomy. Both museum and medal bear his name. It will be remembered that, in the Boer War, Professor Hughes organised and ultimately personally administered the Welsh Hospital at the seat of war; but, before leaving Pretoria for England, he contracted enteric fever and died in November soon after reaching London.

The death of Professor Alfred Hughes, wrote Viriamu Jones, will cause profound sorrow to all who knew him. We in Cardiff shall not readily forget the great services he rendered to the University College as first Professor of Anatomy in the newly founded Medical School. His patient devotion and rare vigour as a teacher, his sweet temper and helpful presence, his force of character, the pleasantness and strength of his whole personality, won for him the most sincere and grateful affection of his colleagues and students; and no Welshman could be with him long without a quickening sense of kinship, for he had a great love for Wales and a vivid desire to do it service.

To Professor Haycraft and to Professor Alfred Hughes the Cardiff School of Medicine owed its high standard of efficiency and its students their brilliant successes in the beginning.

In December of 1893, a student passed the M.D. examination in London and won the Gold Medal in State Medicine. In 1896, the school had forty students, of whom no fewer than twenty-six were preparing for degrees of Medicine in London, and two women students who were preparing for the London Intermediate M.B. In 1897, the Gold Medal and Exhibition



in Anatomy were won by Mr. H. S. Clogg—an honour which had only once been gained during the last fifteen years by a student of a provincial school.

*The Craddock Wells Charity.*—A Charity, known as the Wells Charity, founded by Craddock Wells, by his will, dated September 5, 1710, devised lands and premises (valued in 1883 at about £30,000) to twelve Aldermen of the Borough of Cardiff, upon trust, 'for the educating and bringing up of so many poor boys and girls of the Town of Cardiff as should be named yearly and from time to time elected and chosen by the said Aldermen, or any six of them.' Craddock Wells also directed that 'such Boys and Girls should be well instructed to read, write and cipher.'

As above indicated, the administration of this Charity was in the hands of the twelve Aldermen, with whom the Mayor acted, *ex officio*.

In 1880, the Mayor, Mr. Rees Jones, spontaneously presented himself before the Departmental Committee on Education in Wales and Monmouthshire, then sitting in Cardiff, with resolutions passed by the Trustees of the Charity stating to the effect that the wants of the working classes in respect of elementary education were amply supplied by the legislation of Parliament, and that they thought the funds of the Charity should be applied still for the good of the poorer classes, but in another direction.

The Trustees had resolved that a certain proportion of the available funds should be applied to the College, because a considerable amount of money would be required to build the College, and they considered that a contribution for that purpose would be a proper application of the funds of the Trust. Mr. Rees Jones also spoke of the probable increase of value of the property of the Charity. Again, in 1883, when the choice between Cardiff and Swansea for the location of the College was remitted to the decision of Lord Carlingford, Lord Bramwell, and Mr. Mundella, the chosen advocates of Cardiff were the Dean of Llandaff and Mr. Lewis Williams. The Wells Charity was mentioned on behalf of Cardiff, and the value of its contribution given by Mr. Lewis Williams at £500 per annum, representing a

capital sum of £15,000. Lord Carlingford put to Mr. Williams the following question :

‘ Are you entitled to reckon with confidence upon the amount derivable from Wells Charity ? ’

Mr. Williams replied, ‘ With absolute certainty.’

A unanimous vote of the Town Council endorsed the action of the two representatives of Cardiff before the Arbitrators by a resolution of thanks for their successful advocacy. Cardiff, therefore, took the very strongest means in the power of its citizens to pledge itself to the undertaking that a large portion of the funds of the Charity should be applied to the support of the College, and the Arbitrators clearly took into consideration the pledge thus given in making their award.

Later on, however, the Trustees of the Charity took up a different position, in spite of the advice of the Hon. W. N. Bruce, as Charity Commissioner ; the question of the proposed grant of money to the South Wales College drifted into an affair of party politics and became one of the difficult circumstances at the College.

At a public meeting in the autumn of 1887, Lord Aberdare spoke again of the Craddock Wells Charity and the fact that the honour of the town was involved in the delay in decision of the Trustees. The close of this meeting was the signal of a most enthusiastic demonstration to Lord Aberdare, the whole audience standing.

A statement dealing with the scheme had been published ; this statement, signed by Dean Vaughan, the Principal, and himself, gave arguments which seemed to him unanswerable. It was, however, described in the Press as an ‘ able statement, but sophistical and unsound.’ The facts were freely misrepresented, and Lord Aberdare, ever alert, could not miss an opportunity of trying to secure corrections in the newspapers. The municipal elections were about to take place, and there might be little scruple in making use of the argument that if the pledges of the Trustees of the Charity were fulfilled there would be a perpetual and heavy addition to the burden of the ratepayers ; but a month later, the *Tarian y Gweithiwr*, one of the Welsh Labour papers, appealed

to its readers to vote for the candidates who were prepared to carry out the pledges given by the Trust to support the College. As no appeal availed, a College deputation was appointed in 1887 to go before the Privy Council to explain the scheme of the Charity Commission dealing with the Charity; Lord Aberdare, anxious that Town and College should act together, pressed the Corporation of Cardiff to receive a deputation from the College before that time and talk the matter over face to face.

Preparations for the deputation to the President of the Council were made, and in November 1887 Lord Aberdare wrote :

As winter approaches I find the mechanical work of writing more and more difficult, and I should never have finished the accompanying document without the aid of an amanuensis. I have endeavoured to make such a statement of our case as may furnish a brief to our advocates. Pray amend, alter or add to it at your wicked will. I should be glad if it could be submitted to the fiery ordeal of the Dean's criticism,<sup>1</sup> although he cannot attend the deputation the Memorial is in the name of the Council. When it has received the final touches please have a fair copy made for presentation to the Commons.

I go to London by the express on Tuesday. Is there any chance of our travelling together?

The day after the meeting of the College Governors and the discussion of the statement as to the Charity, Dean Vaughan wrote :

February 9th, 1888.

MY DEAR PRINCIPAL,—If *reiteration* can do anything, Lord Aberdare will have fully made good the case of the College as against Carr<sup>2</sup> and the Carrites. While I am away, tell me always, dear Principal, if I can *do* anything. I will not fail you wittingly.

Ever your friend,

C. J. VAUGHAN.

<sup>1</sup> The Dean wrote :

'I have seen, and signed, the proposed statement, after introducing a few very slight alterations, the reasons of which will perhaps be obvious, or will easily be explained by Mr. Ivor James who has been with me this morning.

'With lively interest in this, as in everything which concerns the College, I am, always yours,

C. J. VAUGHAN.'

<sup>2</sup> Mr. Lascelles Carr, late Editor of the Conservative newspaper, the *Western Mail*.

Plans to oppose the scheme, deliberately organised by local party politicians and by influential people in the town, were constantly brought to the Principal's notice. He took infinite trouble to understand the different points of view, trusting that the scheme, if explained, would be recognised as a measure for the general good and one above local party considerations.

So ceaseless were the attacks that the Principal, in the Sessions of 1887-8, felt it wise to reply :

Some people think that the Charity Commissioners are robbing the poor, but, it seems to me, that to provide an excellent opportunity for the children of the town to pass from the elementary schools to the college can hardly be called robbing the poor. It is proposed to build a school for the waifs and strays, but these could surely be educated at the existing elementary schools. It is next suggested that the fees of the poorer children should be paid ; but they are already paid by the ratepayers or the guardians, so that the plan simply means the subversion of the charity funds to relieve the pockets of the ratepayers. I can only hope that the people of Cardiff will feel that the Charity Commissioners are not, as has been alleged, attempting to divert that fund from the poor but have utilised it in the best way to secure the best advantages for the people of Cardiff.

Yet in the summer and early autumn of 1888, two public meetings were called by the opponents of the scheme—one of the ratepayers of Cardiff, the other of the eighty guardians of the poor. Both failed in their object. Moreover, the artisans of the town declared in favour of the scheme by a very large majority ; and the Welsh-speaking population of Cardiff, represented by the Cardiff Cymmrodorion Society, did yeoman service in securing its success.

Correspondence in the Press aggravated the dispute : letters signed by important persons condemned the ' modern Robin Hoods ' and inveighed against ' despoiling the working classes,' to which ' Caius ' replied : ' The modern Pharisee imitates his Jewish prototype : " Why was not this ointment sold for three hundred pence and given to the poor ? " This he said not because he cared for the poor.'

The agitation against the scheme of the Charity Commis-



sion for securing the funds to the College was carried on till mid-April 1889. The scheme, as Lord Aberdare said, 'had been approved after much hesitation (but it was all the better for that) by every public body in the borough and by every public meeting ever since its real provisions, which had been much misrepresented, were understood.'

The official attitude, however, remained encouraging. In December 1888, Lord Aberdare wrote :

I have just heard from Mr. Patrick Cumin that the Craddock Wells scheme is now 'ripe for consideration by the Lords and Vice-President for approval or disapproval.' The case can be determined, he hopes, in a few days.

In December 1889, Lord Aberdare reported progress from headquarters, but counselled further organised support of the scheme.

January 16th, 1889.

MY DEAR PRINCIPAL,—You will see by this morning's *Western Mail* that Lascelles Carr means mischief. We shall have to get a meeting of Welsh M.P.'s in London—and to prepare a careful statement. We shall have against us Jesse Collings, and *hoc genus omne*.

Sincerely yours,

ABERDARE.

At last, in March 1889, the Governors of the Charity, hearing that a petition against the scheme was being got up in Cardiff, passed a resolution by 16 to 8 to petition both Houses of Parliament to confirm the scheme of the Charity Commissioners.

On April 12, Mr. Jesse Collings moved in the House of Commons 'That an humble address be presented to Her Majesty, praying Her Majesty to withhold her consent from the scheme for the management of Craddock Wells Charity in Cardiff now lying upon the table of the House.'

In the course of the Debate, the Vice-President of the Council, Sir William Hart-Dyke, spoke in favour of the scheme, as did also Sir Edward J. Reed. Mr. Joseph Chamberlain, supported by 'the faithful Jesse,' spoke against it to an accompaniment of 'divide, divide, divide,' from the Welsh Members, and they were followed by Mr. Mundella.

At five minutes to 2 A.M. the question was put; and the majority against the motion was 128.

On February 23, 1889, after considering the reply of the College authorities to the scheme of the Charity Commissioners and lengthy discussions, the Governors of the Trust passed a resolution acquiescing in the scheme.

Lord Aberdare wrote on May 30, 1889, 'I have just heard that the Queen in Council has approved the Wells Scheme.'

Thus, nine years after the original proposal of the Trustees, six years after the decision of the Arbitrators, the promise of the trustees was fulfilled; and in 1889 the College received, by the terms of the new scheme, the addition of £500 a year to its meagre income as promised, and besides £300 a year to be awarded in scholarships for students from elementary schools—the latter an unexpected and doubly welcome boon. So ended a long-fanned and somewhat violent controversy.

There is just an echo of it in the following extract from one of Lord Aberdare's later letters :

*October 10th, 1890.*—I hope Mr. Carr will be elected to the Council [of the College]. He was a good friend to the College in everything but the Wells Charity and did valuable service. His new position as Vice-Chairman of the Technical Instruction Committee renders it doubly desirable that he should be elected to the Council.

But Mr. Lascelles Carr was not re-elected: his action over the Wells Charity was too recent an event.

*Building Fund.*—The College rapidly outgrew its small and rather makeshift buildings. In ten years 1884-94, the number of students had increased from 150 to 350,<sup>1</sup> and the number of departments from three to ten. The engineering and medical schools particularly required better

<sup>1</sup> 1885.	Number of students	140.
1887.	"	145.
1889.	"	165.
1890.	"	150.
1894.	"	350.
1896.	"	391.
1897.	"	431.
1900-1.	"	551.

and more up-to-date accommodation than their present 'few wooden shanties'; moreover, apart from the primary consideration of space, it was only fitting that the College, which was beginning to play such an important part in the life of Cardiff and South Wales, should be housed in a convenient and dignified building.

In 1885, Viriamu Jones wrote to Lord Aberdare :

I should be in favour of beginning before very long to accumulate a building fund : I should like to see this fund growing year by year till in seven years' time we should have at our disposal means to erect College buildings worthy of the work that is to be done in them and calculated to inspire in the minds of the students that taste for good architecture which is so conspicuously absent in the Welsh at present.

In 1889 a Committee was formed to appeal for funds for building. One of the most active workers on this Committee was the American Consul at Cardiff, Major E. R. Jones, a native of North Wales. He addressed above eighty meetings in the industrial centres of South Wales, and so impressed the people of these districts with the importance of the College and its bearing on their life that scholarships were founded of the value of £25, £30, £40, and £50, mainly by the contributions of the workmen of the several collieries, to help the ablest of their young men to receive a collegiate education. To some extent this appeal prepared the way for the remarkable union of the counties of South Wales and Monmouthshire with the College in the establishment of the Engineering Department and of the technical classes which was carried into effect a few years later under the provisions of the Technical Education Act, 1889. Appeal meetings were held at all the larger collieries. Principal Jones himself went to speak to the men of the Dare and Parc collieries. The money so collected furnished the temporary accommodation.

In July 1891, the Council of the College determined to entreat Mr. Goschen (the Chancellor of the Exchequer) to give them the opportunity of laying the facts of their destitute condition before him. It was plainly to be seen that there would be a large increase in the number of students

due to the addition of the Engineering School and the Day Training Department.

On July 21, 1891, Lord Aberdare wrote :

I have signed the Memorandum.<sup>1</sup> My only doubt is lest we should be going too fast, and undertaking more than we can at once execute. But as the work will be practically only an extension of that to which we are bound, I have overcome my hesitation. You must bear in mind that the Government has just undertaken a very large additional expenditure in Elementary Education, which has been increased beyond their original estimate by amendments accepted in the House of Commons. So that the plea of impecuniosity may be a real one, and the moment unpropitious for persuading the Chancellor of the Exchequer to undertake fresh liabilities.

I spoke to Mr. Goschen a few days before he wrote to Lord Bute, and augured from his manner that he was not favourable to our demands.

Again on February 21, 1892 :

Could you tell me which will be the chief points for discussion ? I hope that we may profit by the 'mitis sapientia' of the Dean.

Goschen broke tryst at breakfast yesterday. No wonder ! for it was snowing heavily. So I must write, but before doing so, I should like to refresh my memory by reading the Memorial again. Would you kindly send one to the above address ?

*Diffugere nives*—for the present at least—and are replaced by slush.

I can't say that I am hopeful of obtaining an interview with Goschen. If he has resolved to give nothing, he won't see us.

The next day came an exultant note :

I have just shot Goschen flying, and pressed him to grant an interview. He said that with £2,400,000 to find for free education, besides other large educational grants, he did not see how he could undertake more. However, I urged him strongly to see us, and he said that he would take a few days to think over it.

I cannot frame a guess whether he will see us or not.

I *must* remain in town till Saturday.

A month later he wrote :

March 29th, 1892.—I am very glad that our interview with Mr. Goschen was so effectively followed up by Dr. Owen and yourself.

<sup>1</sup> Afterwards called the Memorial.



Whatever may be the strength of your arguments derived from the uniqueness of our position, I see clearly that our position would be immensely strengthened by the creation of a University.

If the Chancellor were to single us out as a college for exceptional liberality, he would be continually put on the defensive in meeting the attacks of other colleges, who would not easily accept as an answer our exceptional character.

You make too much of the little I can do in advancing the cause of the College. It is pleasant to be assured that I am not wholly useless.

In the autumn of 1894 it became imperative to face the necessity for building on a larger scale, and it was essential to obtain a Government grant.

No time was lost in arranging for a representative and influential deputation to Sir William Harcourt, the Chancellor of the Exchequer, to ask the Government for a sum of £100,000 towards the erection, at a cost of between £200,000 and £250,000, of new college premises.

Meanwhile, Lord Rosebery's visit to Cardiff early in 1895, for the meeting of the National Liberal Federation, gave hope that, through him, the Government might realise the need of more room and the wretchedness of the present buildings.

In preparation for the evening public meeting on this occasion, excursion trains were run from all parts of South Wales and Monmouthshire. Long before the appointed hour 4000 men from the colliery districts were standing in the centre square of the temporary pavilion, from the floor of which tiers upon tiers of seats sloped upwards on the four sides. Being Welshmen, they passed the time in singing; the rest of the audience gradually took their places to the sound of the mighty chorus of men's voices in 'The March of the Men of Harlech.' Lord Rosebery, on entering, was received with thunders of welcome, followed by the singing of the Welsh National Anthem. He told the President of the Cardiff Liberal Association afterwards that he had been quite unprepared for, and was almost overwhelmed by, such a reception.

The next day Lord Rosebery visited the College, and Lord Aberdare wrote apropos of this visit :

No ceremony ! but, of course, a fair attendance of Professors, etc. (clad in Sunday-best). I don't suppose that Lord Rosebery can give us much time—and *that* will best be utilised by taking him about the building, showing the efforts which have been made to meet the educational demands on the College.

Mr. Bryce stays at Dr. Edwards', but has some intention of coming to Duffryn on Friday night after the meeting. As he wishes to see the College, I will ask him to pay a separate visit. Thus, in the course of two days, we shall have had the advantage of indoctrinating two Cabinet Ministers. Mr. Bryce, as Assistant Commissioner on the (I think) Endowed Schools Inquiry, reported upon Wales, and will therefore take a special interest in us.

The Principal's position prevented his taking part in politics, even to attend a meeting : it was the greater pleasure to him to entertain the Premier at the College, where a crowd of excited and not wholly disinterested students presented Lord Rosebery with an address, in view of the impending deputation, hoping that he would be duly impressed by the overcrowded condition of the building.

After Lord Rosebery's visit, the Chancellor of the Exchequer intimated to Lord Aberdare his willingness to receive a deputation, probably about the middle of March.

But before March Lord Aberdare had succumbed to influenza, and he passed away on February 25.

When arrangements for waiting upon the Chancellor of the Exchequer were nearly completed, he sent to say that he preferred to be excused from meeting a deputation ; the memorial was therefore sent to him with a list of the names of the people who would have presented it. At the end of June the promise of a sum of £20,000 was received, to be paid in instalments on condition that a sum of the same amount was raised by the locality. A further sum of £10,000 was offered by the Drapers Company also in the form of a 'challenge' and on condition that the country should raise the £20,000 within a year.

The pressing question of permanent housing was also accentuated by the disposition of the Infirmary Committee to sell their property. From 1883 onwards there were many deputations and interviews between the Principal and other members of the College Council and the Town Council on the subject of the Corporation grant of £10,000.

In 1883, a deputation went to ask that interest should be paid on the promised gift. In 1884, the Corporation sought for parliamentary powers to sanction the gift, inserted a clause into the Cardiff Corporation Water Bill, and, though the grant had been unanimously agreed to by the ratepayers, there was opposition to this one clause in the House of Lords, though a session later, when introduced into the House of Commons by Sir Edward T. Reed, the clause was passed with the rest of the Bill. The difficulty being overcome, the Corporation paid the interest of £400 per annum for eight years, until the question of the legality of the *method* of payment was raised and ended in a judgment to stop the payment of the interest.

On May 14, 1895, the Finance Committee of the Cardiff Town Council received another deputation from the College, including Mr. Alfred Thomas (now Lord Pontypridd) and Viriamu Jones, who then stated that the Town Council had approved of the purchase of the old infirmary buildings for the University College, and asked the Council to 'place them in the position of completing this purchase by giving the generous contribution of £10,000 they had promised eleven or twelve years previously, and upon which unpaid sum they had paid a certain amount of interest at the rate of £400 per annum.'

To this the Committee replied that they 'admitted the moral liability of the Corporation to the University College of South Wales and Monmouthshire for the payment of this interest accruing since 1884,' and declared their intention of seeking powers to pay the arrears of interest, now amounting to about £1400.

The principal sum of £10,000 was paid to the College in 1895, and in 1898 the Corporation sought and obtained powers to pay the arrears of interest, owing since 1894, the amount being then some £1623.

Turning to the actual work of the College, at the Council meeting in January 1893, Dean Vaughan spoke of the last list of London University examinations as a very important record in the annals of the College :

Eighteen present and two past students graduated at the

London University in the past October—total 20. This was the greatest number of students sent to the University of London by any institution in the United Kingdom. Aberystwyth (which headed the list with 14 in 1890) stood next to Cardiff this year with 15 present and 4 past, and the Mason College, Birmingham, with 16. And two years before three Cardiff students for the first time succeeded in the M.A. examination.

A year later, Lord Aberdare, Viriamu Jones, and representatives of the other two national colleges were received by Sir William Harcourt, to whom they presented the petition for a grant of £3000 for the new University of Wales. Lord Aberdare said :

If we are entirely unsuccessful to-day we retire baffled and beaten without having before us any clear means of availing ourselves of the advantages we have derived from the grant of the Charter. Since 1863 nearly £400,000 has been found in Wales, half of it within the last two or three years, for her university colleges, intermediate schools, and theological colleges ; yet at Cardiff a considerable proportion of the students worked in wooden sheds, more properly belonging to the thirteenth or fourteenth century than to the nineteenth.

The Dean, writing in October 1895, said :

The progress of the Institution is indeed by leaps and bounds—and to you, more than to any other man, we owe it.

We have reached a point of immense responsibility. Magnificent offers are made to us—but made on conditions which imply a superhuman effort if they are to be realized. To-morrow will, I trust, witness the inauguration of very definite plans for evoking a response worthy of the Principality to the challenge (I had almost called it) of the Treasury and the Drapers Company.

I cannot doubt the eventual answer—but ‘ the voice of the charmer ’ will be needed to inspire it.

A public appeal for the Building Fund was made at a meeting at the Town Hall, Cardiff, summoned by the Mayor, Lord Windsor, on February 5, 1896 ; the subscriptions given before the meeting ended amounted to £13,400 and the appeal met with a response from all classes of the community. In a large number of collieries a levy of sixpence per head was made ; while in March 1896 came the promise of £22 11s. 6d. from the tradesmen and workmen of one



colliery village, and this 'during the most depressed state of trade experienced locally for twenty years.' The Cardiff Football Club gave its contribution, the scholars of several schools, elementary as well as secondary, made collections, and valuable assistance was rendered by the Trades Councils of Cardiff and Barry. The result of all these efforts (with the public meetings which were held in many parts of South Wales and Monmouthshire and the appeals to various representative bodies) was that the stipulated sum of £20,000 was promised by the time specified by the Drapers Company. The Principal, however, had all along been bent on raising £30,000, so that they might be able to go to the Chancellor of the Exchequer and say, 'You said you would give us £20,000 if we found £20,000. We have found £30,000; now give us the other £10,000.'

Others beside the Principal had every confidence that the £30,000 would be raised, though they relied for success on his powers of persuasion rather than on the obvious justice of the cause. One Governor wrote to the Principal: 'The simplest and most effective plan is for you, with your consummate tact, to get thirty persons to give £1000 each. I believe you can do it.'

And the Chairman of the Monmouthshire County Council wrote: 'I am personally anxious that this wave of generosity should be taken full advantage of, so that if possible we may get considerably more than the absolute necessary £20,000. Please send me at least 200 copies of the documents asked for.'

Six months after the publication of the appeal the Principal was able to tell the Court of Governors that there only remained a balance of £260 to be made up, and that he had guaranteed this in conjunction with Colonel Page so as to be able to assure the Drapers Company that the £30,000 had been secured.

At the beginning of what was to prove—though no one then suspected it—his last active Session, in October 1898, the Principal defined very fully and clearly the financial position of the College. He showed that there was on the Building Fund account a sum of £25,928 in Lloyds Bank

on deposit and £12,709 on current accounts, with another £2300 as mortgage on the Aberdare Hall buildings.

The building fund, including a cheque of £500 not yet paid in, now amounted [he said] to £41,422 19s. 3d., and as this was not utilised because they had not yet got their building site, it was accumulating at  $2\frac{1}{2}$  per cent. interest at the bank. This total did not include the Drapers Company's promise of £10,000, and thus practically there would be £51,000 at the disposal of the Council for building as soon as it should be in a position to get the site. They looked forward to the new buildings with a great sense of relief, for the number of students continued to increase, and they scarcely knew what to do in order to find room for them. Members of the Court of Governors who visited the College from time to time saw how the wooden buildings increased in number.

What had really happened was that in consequence of the foundation of the Welsh University there had been an increase in the number of students taking University work, and there had been a still more marked increase in the number of students taking advanced work, owing to the admirable system adopted by the University of Wales, whereby students were not kept back from the subjects they knew because of the subjects they did not know. That used to be the case when their students were under the domination of the University of London, and had a tendency to check the advanced work of the College; and this, he was glad to say, had been changed in a most remarkable degree by the regulations of the University of Wales. Their advanced classes were now advancing by leaps and bounds. They had no less than twenty students this year in the class working for degrees in the department of physics alone; their accommodation and resources were strained to the utmost. They were obliged to build a new physical lecture-room in order that the present lecture-room might be turned into a laboratory. He did not wish to speak of their wooden rooms with any disrespect, for really they had done admirable work. However, all that would ere long be remedied, and none too soon. They had last year nearly 500 students at the College, and the Intermediate Schools had hardly been at work a sufficient number of years yet to send students to the College. When they would send, he did not doubt that the number of students would increase to 750 or 800, and he should not be surprised to see within ten years the number of students over a thousand. The Council had therefore a task of great magnitude before it in providing buildings adequate for this continually increasing work.

But, while they had part of the money, they had as yet

on land to build on. The question of a site for the permanent building had first been discussed in 1887. The name of the Marquess of Bute figures often in the negotiations. He was the largest landowner in Cardiff and owned the only eligible sites. Viriamu Jones wrote in 1887 to Lord Aberdare :

We made a very strong appeal to Lord Bute for a site in Cathays Park. He grants it, and by so doing gives proof of a great interest in the College.

In fact, when the Principal met Lord Bute, two sites for the College were suggested, but neither proved suitable. The site proposed in Cathays Park gave no space for recreation grounds, and that in Cathedral Road was not central and allowed of no expansion. It was then that the first temporary buildings were put up on the ground at the back of the College.

The question came up again in 1892. Straight opposite the Principal's house were the fifty-eight acres of Cathays Park in which the College authorities had for a long time coveted a site. In 1898 the Corporation bought Cathays Park from Lord Bute. This gave the College the long-looked-for opportunity. The Park was going to be turned into public gardens, and a Town Hall, Law Courts, and other public buildings would be erected in it ; surely it would be most appropriate to have the College there too. The Corporation were approached. They showed reluctance. From some quarters there was strong opposition. The Principal was absent owing to the illness to which he eventually succumbed. Professor C. M. Thompson, who was acting in his place, wrote in May 1900 :

As regards the site question, I have done my best, but I feel it very difficult to estimate with what success. I do not think they will give us ten acres, but I think there is a good chance of our getting four or possibly five. This would not give a recreation ground . . . it has been a great misfortune to the College that the work had to be done by a new man. I had to get to know nearly all the people most concerned, and that of course was a great disadvantage.

However, nothing was settled, and in October 1900 Viriamu Jones resolved to make an appeal in person. He asked to be allowed to speak to the Corporation as a 'belated member of the deputation from the University College that told its tale now six months ago.' 'Many will remember the skilful and persuasive appeal—a masterpiece of eloquence, as Sir Harry Reichel has described it—by which he induced the Cardiff Corporation to grant a site of five acres of Cathays Park to the College.' <sup>1</sup>

#### PETITION OF THE UNIVERSITY COLLEGE

*(As presented by Viriamu Jones on October 31, 1900)*

I recognise in coming to you that I am coming to a body of trustees. I must not appeal to you for simple generosity as one would appeal to a private individual. If the College is to be successful in its petition, it is necessary to prove that it is in the widest sense to the true interest of the town that your response to that petition should be a liberal one.

It is agreed, I believe, that the Cathays Park would afford the best possible site for the new buildings of the University College. Now, I want to point out to you that the reasons for this superiority of the Cathays Park site have a very significant bearing on the issue before you, because they are reasons which mainly concern Cardiff, which affect Cardiff far more than other parts of South Wales and Monmouthshire. These reasons are the centrality of the site and the exceptional opportunity it affords for the realisation of a great architectural design. Taking the second reason first, from the standpoint of architectural beauty there would be advantage in having the College buildings in the Park. You had in mind, had you not, in purchasing the Park, the idea of a great group of public buildings harmoniously arranged in it? If I remember aright, this conception played a part, and rightly played a part, in determining you, and in determining the town's meeting you convened, to make this great acquisition. But the enjoyment of this architectural beauty, this harmonious design, will mainly belong to the inhabitants of Cardiff. It is true that visitors will likewise enjoy it—and Cardiff is always glad to welcome them—but primarily the result of an effort to make Cardiff more beautiful is of advantage to Cardiff itself.

The same thing is true of the first reason for the superiority of the Cathays Park site—its centrality. It is mainly in the

<sup>1</sup> *Viriamu Jones and other Oxford Memories.* E. B. Poulton, F.R.S.



interest of Cardiff students resident with their parents that it is so important that the College site should be central. The number of such students is considerable and is constantly increasing. The average number of Cardiff students during the three years 1883-6 was 61; during the years 1886-9, 53; during the years 1889-2, 76; during the years 1892-5, 114; during the years 1895-8, 158; and last year the number was 165.

The College also recognises, and has always recognised, its duty to the town in respect of evening classes; and for the sake of these classes, and in the interest of our joint work with the Technical Instruction Committee, which you will, I think, agree with me is of great advantage both to the town and College, centrality of site is not merely important but necessary.

Both grounds, therefore—the ground of architectural beauty to be attained by the symmetrical grouping of well-designed public buildings, and the ground of centrality—primarily concern Cardiff. It is mainly from the standpoint of the interest of Cardiff and the convenience of Cardiff students that we are justified in saying that a site in Cathays Park is the best possible site for the new College buildings. And it is because for these reasons the Cathays Park seems to the College authorities to be best, that we ask to be permitted to build there.

But we do not come to you asking merely that a site may be allotted to us in the Park. We ask that that site may be freely given. Mr. Mayor, we ask that the site may be given, because we have not got the money to pay for it. Nothing can be more definite than my statement, and any member of the Corporation who will go through the College accounts with me may readily satisfy himself of its accuracy. I do not say that at some future time we may not be more amply endowed by generous benefactors. I believe we shall be. But at present the College is not in a position to pay for this site. Could we get the money to pay for it? Gentlemen, what do you think? I, for my part, should despair in going to anyone, however friendly he might be to the University College, to ask, not for buildings, not for a new department, not for the endowment of Professorships or Scholarships, not to provide more ample educational facilities, but in order to enable us to pay for a site which this Council has it in its power to give. I feel it would be an unsuccessful appeal: nay, more, that our friend might turn on me, not without something of indignation, and say: 'Why do you come to me if the Corporation do not consider the welfare of the town sufficiently involved in the prosperity of the College to justify them in helping you themselves in so far as they have power to do it?' That would, I fear, be the answer. I have no hope of being able to obtain by such an appeal the fund that would be necessary to pay for this site.

In the second place, having regard to our financial position, we dare not burden ourselves with anything like the annual payment that would be necessary, by way of interest and sinking fund, if the Council were to offer us this most favourable method of paying for the land. It is with very great difficulty that we can now make income and expenditure approximately balance ; and, looking forward to the increased cost of maintenance and probable increased taxation and rates in connection with our new buildings, any such annual payment would be wholly beyond the power of the College to make.

In the third place, we could not give up our present buildings in exchange, for we shall need them for many years to come.

In recapitulation, I would beg the Corporation to realise that we have no money now that could be applied to the purchase of the site ; that it would be difficult, and probably in the circumstances impossible, to collect money for this purpose ; that all the money we can get by public appeal for years to come will be required in order to complete the buildings and increase the educational efficiency and scope of the College by increase in its staff and educational appliances ; and that, until large additions are made to our building fund, we cannot wholly bid good-bye to our present premises, and therefore cannot regard them as available for exchange.

In these circumstances a conceivable answer is that if the College cannot pay for the land it must do without it. And this brings us to the heart of the matter. Mr. Mayor and Gentlemen, I have to submit to you that the true interest of the town, the real welfare of those whom you represent, make such an answer impossible, and that they require from you as trustees for the public good the liberal response for which we plead. And why ?

First, on educational grounds, because the higher education of the town depends on the efficiency of the College, and the efficiency of the College, as an instrument of education here, will be greatly increased by its having new buildings in Cathays Park, which we have agreed is the best possible position for them from the standpoint of Cardiff's interest and advantage. The College is an essential part of your educational system, essential to the completeness of the ' ladder of learning ' which has been established in the town, whereby every child of sufficient ability, however scanty be the means of the parents, has the opportunity of rising from the Elementary School to the University. And, of all the institutions in your system, it may perhaps with greatest force appeal to you for generous treatment on a critical occasion, because it is the only one that does not receive a regular annual contribution from the rates for its maintenance. I would further lay stress on the fact that its students are not, as in some Universities, mainly from the wealthier classes of the

community. The College Memorial states that last year 307 students were known to have begun their education in Public Elementary Schools; and I remember some years ago making an investigation which showed that upwards of a third of the students during the first ten years of the existence of the College were sons and daughters of the artisan and labouring classes. It would not be difficult to quote cases of students starting from very humble homes who have attained to the highest University Honours. But I must not trespass on your time, and I need not, I think, labour the educational ground further. Let me sum it up by saying that we believe the College to be of great and increasing importance as a factor in the intellectual life of the town, and that this constitutes solid reason why you as trustees for the public welfare should help it forward in the way suggested, provided this course be consistent with other aspects of your public duty.

And this brings me to the material grounds on which our appeal to you may be based, and for which I venture to bespeak your careful consideration. They are not perhaps the highest grounds, but they deal with matters which you as managers of the public estate are bound to care for, and on which we ought, if possible, to satisfy you. It might be urged in reply to us: 'We admit all that you have said: we admit the educational reason advanced to be forcible: but one of our first duties is economy, and already the town stands committed to so large an expenditure, to so many responsibilities, that for the present there is no room for further generosity, no room for increased expenditure even on an object so desirable in itself, and which we should so much wish to help, as the extension of the facilities for higher education in the town.'

Mr. Mayor and Gentlemen, to that argument I for one shall attach the greatest importance if it be advanced and can be sustained in the face of certain considerations I have presently to place before you. I recognise that you are in a very special way bound to administer our municipal possessions and resources with the utmost regard to economy and the closest examination of the probable productiveness of expenditure. But I believe it may be demonstrated that the rates cannot be diminished by the lightest fraction of a penny by the dismissal of the College from the Park, and further, that you would, in so dismissing it, probably forfeit prospective increase in rateable value and check the development of some sources of the town's prosperity which would indirectly affect that value.

In 1882 there was a somewhat similar question before you. The question then was one of expenditure to bring the College here. The Corporation voted £10,000, and it voted this sum when the rateable value of the town was about two-fifths of its

present value. What has been the result? The result is that the College is here; it has educated many sons and daughters of Cardiff; its work in that regard is continually increasing, and the opportunities it affords them are continually expanding as the number of its departments increases. And meantime, what of your pecuniary sacrifice? Mr. Mayor, it has been paid back to the town over and over again. I do not say that it has been paid back to the rates, though I believe that to be so. I cannot prove that without the assistance of some of the masters of municipal finance, whom I see before me, who will, I feel confident, make right conclusions, whatever they may be, from the statements that follow.

First, I have prepared a statement of the sums gained in scholarships and exhibitions by Cardiff students each year since the foundation of the College. During the three years 1883-6 the average amount gained per annum was £132; during the years 1886-9, £294; during the years 1889-92, £710; during the years 1892-5, £1233; during the years 1895-8, £1383; and during last year it was £1779. The total amount gained by Cardiff students from the beginning is £16,278.

Secondly, we ought to bear in mind that the education given at the College costs far more than the fees charged to students. I am within the mark in reckoning the difference between the cost of a student's education and what he pays for it at £20. Taking that figure and making the calculation for all Cardiff students who have attended the College since 1883, we have, as the difference between the total cost price of the education given to these Cardiff students and the total fees paid by them, the sum of £33,180. The amount of this difference, for the single year ending in June last, was, on the same basis of calculation, £3300. And it is to be considered that this education is obtained by Cardiff students without leaving home and therefore without the expense which necessarily falls on students coming from a distance to reside in the town.

Thirdly, I have prepared another table for your consideration, from which you are perhaps in a better position than I to draw a true inference. It is a return of the total expenditure of the College since its foundation to the present time. After deducting all moneys received and administered on behalf of the town, under the provisions of the Technical Instruction Agreement, the total expenditure stands at £206,000. The corresponding expenditure for last year was £13,993.

Fourthly, I would beg you, in the light of your business knowledge and experience, to consider the bearing of the fact that, in consequence of the establishment of the College, a large staff of professors and lecturers (14 in 1883-4, 44 in 1899-1900) permanently reside in or near Cardiff, and a large number of students



coming from a distance find lodgings here. I think that it would be a moderate estimate to say that from £20,000 to £25,000 per annum is being spent in the town under this head entirely owing to the fact that the College is situated here, and I believe close investigation would show it to be more. What amount of this is profit I must leave you to determine. You will know better than I whether the calculation should be made on a basis of 5, 7½, or 10 per cent.

These are the considerations which I put forward in proof of my statement that the £10,000 has been more than repaid, even in money value, during the past seventeen years. And I say, therefore, that on every ground—intellectual, moral, and material—your policy of 1882 stands justified by the event, and that no body of trustees could have been truer to their trust, and no body of representatives more careful of the interest of those they represent, than the Cardiff Corporation of that time. And now the College again needs your help. If you give it, will not the same things happen? Are not all the considerations I have urged in full force as regards the future as well as the past? Is there not ample room for development? May we not, for instance, hope to see some day, instead of 500 students, 1500 or 2000, with a corresponding increase in our staff? May we not anticipate, from a further enlightened fostering on your part of our efforts at expansion, that the College will become a factor ever more and more powerful in the intellectual life of the town?

I have now dealt with the educational grounds, and the material grounds, upon which we base our appeal to you for liberal treatment in this matter of the site. It remains for me still to bring before you some general grounds, which seem to me not without importance.

And, first, a liberal response on your part will establish and extend the reputation of the town as an enlightened and sympathetic home of national institutions. Secondly, having regard to the fact that Cardiff, in 1882, sought with vigour and obtained with joy the privilege and responsibility of being the home of the College, the town would not be happy in the future to look back at a page of its history that recorded how at a critical time it had failed to do everything in its power to help. All that Cardiff did in the years of foundation, all that it may now do in these years of consolidation, to aid the growth of this child of its adoption, will for ever remain a legitimate source of municipal pride and self-respect, and these are very powerful elements of a noble municipal life.

Finally, unless you make a liberal response to our petition, we shall, I believe, find it difficult to collect the further large sums of money required for building. I believe the way to obtain

these sums is to begin building on a complete plan. Nothing will more powerfully appeal to the imagination of the generous donors, whom we hope to find, the friendly millionaire we shall sometime meet, than a great design begun on so magnificent a site as you have it in your power to give. If you give, your gift is not quite as the gift of others. For you will give as trustees for the public good ; you will give, believing that the welfare of the inhabitants of this town is involved in the extension of the College, and you will give with this implication after seventeen years' experience of the work we do and the spirit and way in which we do it, proving thereby the appreciation in which these are held by those whom you represent, those who are nearest and know best, the people of this great town of Cardiff. I believe that your liberality will be on that account a potent weapon ; and I pray you, Mr. Mayor, I pray you, Aldermen and Councillors, for the reasons contained in the College Memorial, for the reasons I have given you, for the sake of higher education in this town and the Principality, for the sake of the College in which we are all so deeply interested, to fostering the growth and success of which we all stand so deeply committed—I pray you, in the highest interest of those whom you represent, to be unanimous in placing that potent weapon in our hands.

## CHAPTER VII

### INTERMEDIATE EDUCATION

I am well satisfied with the progress of education in Wales. My initiative is working like the 'little leaven,' and I hope when Wales has worked out its own salvation, it will have the effect of leavening the larger and more inert mass of Englishmen. I always desired to see Wales become a model for our national system, and I am increasingly hopeful that it will gradually become so.—*From a letter written by Mr. Mundella in 1893.*

IN his address, given at the opening of Firth College in October 1881, Viriamu Jones alluded to the recently issued report of the Committee of the Privy Council. 'It is such,' he said, 'as to make one expect a great advance in intermediate and higher education in the Principality.' A few months afterwards he wrote from Swansea: 'I am trying to make the people here build a college—it is sorely needed.' His experience during his first few years at Cardiff only deepened his conviction as to the urgent need for intermediate education in Wales. There was but a viva voce entrance examination to the College, and the educational standard of the students when they first came was very low. The professors had to devote a great deal of time to elementary instruction. The establishment of the College aroused the hostility of many of the head masters of the grammar schools and proprietary schools of the district, who considered it a rival institution.<sup>1</sup> Still more were these head masters opposed to the introduction of intermediate schools, as they foresaw that parents would be attracted by the low

<sup>1</sup> In a speech at Carmarthen in 1888, Viriamu Jones, hoping to remove this misunderstanding, said: 'There is no clashing of interest between the colleges and the schools. . . . We have the keenest possible desire that the grammar schools should take off our hands all preliminary work in connection with the students who are going through a strictly proper course of education from the Intermediate School to the College.'

fees of such schools and that it would be difficult to convince them that the more expensive schools were able to give a better education. Experience in relation to the opening of at least one Higher Grade School justified this apprehension: Viriamu Jones received letters from one head master expressing keenest disappointment and dismay at the effect on his own school, and appealing for help to counteract the movement; a very large proportion of scholars were removed to the Higher Grade School, and he had found it impossible to persuade parents of the difference in curricula and aim of the two schools and the difference in the preparation given to boys who were destined for professions. In 1885, as already recounted, the Head Masters of Welsh Endowed, Grammar, and Proprietary Schools met in conference at Shrewsbury to form a provisional committee for the protection of the old foundation schools 'which had borne the burden of educational work in the past and which, in the opinion of many, have never been in a more efficient condition than they are at present,' and to watch the progress of the Intermediate Educational Bill for Wales. The resolution passed included a suggestion that 'the age of admission to the State-aided Welsh Colleges should be seventeen (instead of sixteen) and that there should be such an entrance examination as would effectually protect such colleges from the necessity of undertaking elementary instruction.'

These fears were largely illusory, as the majority of students who entered the College during its first years could have had no opportunity at all of secondary school training.

Any entrance examination that could have been instituted then at the College would rather have been a means of classifying than the establishment of a standard for admission; such an examination as was proposed by the Conference of Head Masters would have effectually barred the entrance of the majority of students to the College; and as their average age at entrance was twenty to twenty-one, to reject these students would in no way have benefited the schools.

During the spring of 1884 an important deputation, organised by the London Cymmrodorion Society, was



received by Mr. Mundella, Vice-President of the Committee of the Council.

Earlier in the same year, before he had been a year at Cardiff, Viriamu Jones had asked advice of Mr. Henry Richard, M.P., the Vice-President of the University College, as to the most effective method of appeal to the Government for legislation. Mr. Richard replied :

I think the best thing that can be done is to elicit a strong expression of public opinion in Wales on the Intermediate Education question and to ply Mr. Gladstone and Mr. Mundella with resolutions passed by public bodies or at public meetings. How can you expect us to attend to such small matters as Welsh Education, when we have to regulate the affairs of Egypt and the Soudan, and Bechuanaland and Zululand and the Transvaal and Central Asia and Afghanistan, and in fact to be a little Providence to all mankind, and while the people of this country think it is right we should do so.

In March 1885 the Principal spoke at the first general meeting of the Cambrian Society, which, at his instance, sent a resolution to the Government pressing for the introduction of an Intermediate Education Bill for Wales. He wrote himself to Mr. Mundella, who replied :

*April 20th, 1885.*—I think the Welsh people have ' kept the pot boiling ' pretty well, and there is no occasion for your adding to it. Mr. Gladstone is as anxious as I am that the Bill shall be brought in, if we can see our way to pass it. You have no idea, however, how difficult the situation is. We must pass Redistribution Bills and Registration Bills, and do all that is necessary to facilitate the coming general election.

We *must* also provide all the means for carrying on the public service. And we *must* meet the periodical votes of censure.

Government can do many things, but it has not *yet* reached the power of Joshua to command the sun and moon to stand still. *Time* is the sole difficulty. Be assured, if I can steal a little, I shall deal with your Bill.

I will come to you as soon as I can, but you must be patient a little longer.

On April 29, 1885, a meeting of London Welshmen took place at the Memorial Hall, Farringdon Street, under the presidency of Mr. W. Cornwallis West, Lord Lieutenant of Denbighshire, at which a resolution proposed by the Rev.

Thomas Charles Edwards, Principal of the University College of Wales, was passed reminding the Government of the fact that, although repeatedly included among the measures proposed to be laid before Parliament, no Bill for intermediate education in Wales had yet been submitted by them, and to urge the introduction during the present Session of a satisfactory measure.

The Principal of the North Wales College spoke emphatically of the need of Government action. Expectation of legislation had paralysed private effort—Welsh higher education was in a state of suspended animation—only Government could restore life and vigour. In Viriamu Jones' absence he moved 'That this meeting would impress upon Her Majesty's Government that, in the absence of an adequate number of efficient intermediate schools, the working of the national colleges must necessarily be carried on under most unfavourable conditions.'

Professor Roberts, representing Viriamu Jones, seconded this resolution, and again pointed out that the large increase of students at all the national colleges amply justified their establishment before the inauguration of a system of intermediate education. That very increase in numbers was proof of the imperative need of immediate legislation, showing the large number of Welshmen who had passed beyond school age without receiving adequate education.

Another resolution asked help from the parliamentary representatives of Wales towards these ends, so that if possible the question might be settled before the dissolution of Parliament. The next step was taken by Lord Swansea (then Sir Hussey Vivian), who drew up a petition on the subject and, after it had been signed by twenty-nine Welsh members, himself presented it to Mr. Gladstone and to Mr. Mundella.

Meantime, the already overburdened Government had prepared to respond to the appeal of Wales; and on May 22, at 2 a.m., Mr. Mundella rose to move for leave to bring in a Bill for the promotion of intermediate education in Wales.

The event was thus described by an eye-witness:

Mr. Mundella rose and advanced to the table, upon which he

placed his open notes and began by saying the lateness of the hour prevented him from giving more than a brief outline of the speech he had intended to deliver. He went on at a galloping speed to a ghost of a House, and had spoken for about a quarter of an hour when, to the general dismay, Mr. Biggar stood up and said: 'Mr. Speaker, sorr, I move that the House be counted.' Mr. Mundella sat down abruptly as if shot. The Irish members then rose in a body and left the House in Indian file. All the remaining members, both Liberals and Conservatives, walked to the front benches on both sides of the House. The sand in the glass on the table was running, and the electric bells throughout the corridors of the House were ringing, the signal that 'a count' had been moved. All was bustle and suppressed excitement. 'Were there forty members present?' was the question eagerly canvassed. The Irish members were to be seen peeping through the glass door under the clock, through which one of them entered and sought to entice a member still inside to follow their example. He, however, refused.<sup>1</sup> To obstruct the Bill, by making the count a success, the number must be reduced to thirty-nine. At the expiration of the appointed time the Speaker stood up and, in measured tones, counted the members. When he came to forty a loud cheer proclaimed the fact.

Mr. Mundella sprang up and went at it again, but soon concluded by formally introducing the Bill.

It was a misfortune for Wales that Mr. Mundella was unable to give the speech he had prepared and that he had to defer full interpretation of the clauses of the Bill till June 8, the date fixed for the second reading. For want of this explanation the Bill was much misunderstood.

As soon as he had seen the text of the Bill, Principal Jones, with characteristic hopefulness and appreciation of its intentions, wrote to Mr. Mundella:

I feel that I must write a line to express my gratitude to you as a Welshman on the introduction of our Bill—and I daresay my gratitude is the more heartfelt because by its provisions I feel that a future magnificent success is ensured to our Colleges.

I was afraid that a county rate left optional might not be resolved to in some of our economical or poorer counties; but my anxieties on this head are quite removed, first by its limitation and secondly by the *generous* provision of a grant from the Treasury equal in amount to the sum raised by rate.

<sup>1</sup> This was Sir John Puleston.

I believe that the Bill will thoroughly recommend itself to Wales, and that the result will very quickly be an *immense* improvement in our intermediate education, the poor state of which has come before us during our two years' experience at Cardiff with terrible force.

The great work you have taken in hand in connection with Wales—the reorganisation of Welsh education—is now approaching completion.

I believe that in a very few years it will bear abundant fruit—which will, I know, be your best reward for all the thought and careful attention it has cost you. May I make a criticism—though I have not yet seen the details of the Bill, but only a newspaper account? It is of the greatest importance that the schools should work in close connection with the colleges—not as heretofore the grammar schools have done, with a scarce concealed hostility to them. The Government might indicate that this is their view in the Bill by giving, somewhere or other in the machinery of reorganisation, representation to the University element they have given to the country?

Pardon my boldness of suggestion, but looking to the future I have felt bound to make mention of the matter.

We are more than ever hoping for your presence in Cardiff before long—and there are rumours that you may be able to come during Whitsuntide, and before Parliament reassembles. May the rumours be justified by the event! Can there be a better opportunity (if your health permits) than while Wales is awaiting instruction in regard to the Bill?

After the lapse of twenty-seven years it is difficult to believe that a Bill of this kind could rouse such a furore of excitement. No sooner was its text available than every Welsh newspaper (English and vernacular alike) was flooded with articles, interviews with leading public men, ministers, and members of Parliament and with reports of meetings. While on many sides great gratitude was expressed to Mr. Mundella and to the framers of the Bill, yet the blame far outweighed the praise. The constitution of the proposed county committees was disapproved of, since the persons composing these bodies were not directly elected by the people for the purpose, but by the county magistrates; a clause, introduced to secure to rate-aided schools an unsectarian character, was mistakenly read and dubbed a 'conscience clause'; and there were objections to proposals to leave certain endowments mainly in the



hands of Churchmen. These details could be discussed and re-drafted, but the distrust aroused was general and blinded men to the broad and generous provisions of the Bill through which, by adding to existing endowments, the proceeds of a halfpenny rate and an equivalent sum from the Imperial Treasury an annual income amounting to about £53,600 would be available for the schools that were so badly needed.

Sir John Puleston wrote to Viriamu Jones :

. . . As to the Intermediate Education Bill—I am afraid it won't pass this session. There is not the time for such discussion as it is pretty sure to call forth.

I, as you know, deprecate making it a party question, but our opponents on the Liberal Benches must not expect to have everything their own way, nor should they denounce us for not meekly acquiescing.

No one is more anxious than I am for such a measure, and I have persistently advocated it. Even when first introduced by Mr. Mundella when he was in office, there would have been no quorum in the House but for myself.<sup>1</sup> This, however, is nothing, but I do hold strongly against sweeping away all our old endowments, and to do this is not essential to the measure. I am also opposed to giving the whole control to the County Council. It is neither right nor judicious to ask this. The subject of education should at all events be kept aloof from a strictly political and partisan body. The County Council Elections were contested throughout the Principality on politics and not on the question of education. I don't remember the figures in South Wales, but in North Wales, though the Conservative party is in a minority in all the County Councils, the actual voting showed 25,000 Conservatives against 31,000 Liberals or thereabouts. No one will say that such a minority—especially when it represents probably the greater taxable interest—should be entirely ignored when the educational question comes up. There are some other points in the present Bill which need modification, as I think, in the best interests of the cause of education which I have so much at heart.

As I said in Cardiff at the dinner, we must be mutually reasonable and try to get the best measure attainable. If subsequently there should be seen serious objections, the reasons for amendments would be present—but I am not sanguine of present progress, and I deeply regret to say it.

<sup>1</sup> See footnote, p. 206.

Mr. Mundella also wrote :

Your letter, and your judicious intervention have undoubtedly been very serviceable in correcting some misapprehensions ; still I gather from the letters and resolutions I am daily receiving that there are many minor points on which there arise misconceptions, and that there is a danger of the Welsh people losing sight of the greater questions involved in the measure and of going off into a squabble about matters of mere detail.

The County Committee is a very important factor, no doubt. But it is impossible to devise one, short of an election from the whole country, which is not open to many objections. The one we have devised is the best we could contrive until such time as County Boards are created. Still there will be no difficulty in amending that clause of the Bill in any way that will make it fairly representative. Mr. Lewis Williams<sup>1</sup> wishes that all the Boards shall elect. How is this to be done ? Perhaps I can devise a scheme of voting papers to meet that part of the difficulty.

The local idea is that the Bill has been drawn without reference to any Welsh authorities. There was never a greater mistake. Not only permanent officials, such as Mr. Hugh Owen of the Local Government Board have been consulted, but also the members of the Committee of Enquiry, independent Welsh members of the highest standing, Mr. Osborne Morgan and Lord Richard Grosvenor as the backers of the bill, &c., &c. I have indeed spared no pains to get at the best solution of every difficulty. Do not, however, mention any names. I act on my own judgment after taking advice. And I accept all responsibility.

On January 22, 1887, Mr. Mundella came to Cardiff for a College prize distribution, and spoke to a large assembly in the Park Hall. Of commanding presence, tall and thin, with hair and flowing beard grown grey, he stood like a benevolent prophet of old and in deep resounding voice proceeded to establish a friendly feeling between himself and his audience by speaking of Wales, his ' happy hunting-ground ' for educational experiments. He went on to say that he once overheard some member of the Opposition refer to Mr. Gladstone's persuasive eloquence, and say ' If *we* could but have him for five minutes.' The big audience applauded to the echo. Silence of suspense being re-established, the orator, in slow emphatic accents rising

<sup>1</sup> Chairman of the Cardiff School Board.

to a note of triumph, thundered out : ' But they will not have him for five seconds ! '—a statement which was followed by an indescribable tumult of cheering.

Two further Bills were introduced in 1887, one by Mr. Mundella and one by Mr. Kenyon. The question was then independent of party politics. The Conservative Government undertook the Bill in the following year, but was unable to redeem its promises. In 1889, however, a Bill was again introduced by Mr. Stuart Rendel (later Lord Rendel), who devoted great care to obtaining support for it from both sides of the House. On July 5, 1889, Lord Aberdare wrote :

The Intermediate Bill is quite alive. I rather think that the Government will give way about Monmouthshire [which had been excluded from the previous Bill]. But I don't think the Bill will pass this Session.

However, it was accepted, with certain modifications, by the Government, and became law before the end of the Session.

In a speech at the Mayoral Banquet at Cardiff in 1889, Principal Jones referred to the coming year as a peculiarly important one because the Corporation would be called upon to act under the Intermediate Education Act for Wales and the Technical Instruction Act for England and Wales. The decisions of the Corporation in relation to these would, he said, be of a most far-reaching kind.

What does Wales really obtain under the provisions of this new Intermediate Education Act? What does the Act supply? First of all an Intermediate Education Committee is constituted for each county and county borough, and two members are nominated by the Lord President of the Council. The function of each Committee is to prepare a scheme for submission to the Charity Commissioners. These schemes are now, for the most part, ready and in the hands of the Commissioners; most of them will be laid on the table at the House of Commons and receive the sanction of the Crown during the next Session of Parliament. They provide for the establishment of some eighty new Intermediate Schools and for the foundation of scholarships which will give opportunity to the ablest boys and girls of Wales to proceed from the Elementary School, through these schools, to the University. They further provide for the permanent

existence of County Governing Bodies, permanent local authorities such as the Schools Enquiry Commission of 1868 have recommended for the proper ordering of the schools and scholarship system.

In the next place, the Act has important financial provisions—every county in Wales is allowed to rate itself for the purpose of Intermediate Education to the extent of a halfpenny in the pound, and the Treasury undertakes, on being satisfied of the efficiency of the schools in any county, to make an annual contribution equal in amount to the sum raised by the rate, to be applied by the county to the maintenance of its schools.

This financial provision goes far beyond the recommendations of the Schools Enquiry Commission of 1868. That Commission made mention of a town or parish rate, but did not suggest a contribution from the Treasury. The suggestion of a Government grant to meet the local rate is one of the admirable recommendations made by the Departmental Committee of 1881.

The Intermediate Education Act, then, supplies two things—and they are all that an Act of Parliament can give—machinery and money. The living force, the vitalising energy, is still to come, and that can only come from the people themselves.

By 1895 the counties were administering no fewer than ninety-four new schools. As early as 1887 Mr. Owen Owen had put forward a proposal for a Welsh Education Department at Whitehall. In 1895 (two years after the granting of the University Charter), without full consultation of the Welsh educational workers, a proposal to create a Central Board<sup>1</sup> for the examination and inspection of Intermediate Schools in Wales was brought forward and received the approval of the Board of Education. As soon as he heard of it, Viriamu Jones wrote to Sir John Gorst asking for more information about the scheme. Sir John replied from the Privy Council Office on January 3, 1896 :

The Central Board Scheme referred to in your letter of the 20th ulto., has, I find, been approved already by the Education Department, and was laid on the Table of Parliament last August. As Parliament did not sit for forty days, it will have to be laid *de novo* on the 11th of next month. There will then be forty

<sup>1</sup> A proposal for a Central Body in Wales to be created by Government had been brought forward by Mr. Humphreys Owen in 1875 at a meeting of the University College of Wales, but its suggested function was to grant degrees (*A Sketch of the History of the College* (Univ. Coll. of Wales) 1863-91, by Principal T. F. Roberts, Students' Handbook, 1909).



days for objections to be made. I cannot, as a member of the Government, propose any amendment, but if an amendment is proposed by others, there is nothing to prevent my assenting to it. Your best plan, therefore, will be to get an amendment proposed and then let someone see me on the subject.

The proposed Central Board was to be a representative body, composed of the Principals of the three National Colleges, members of the County Councils, the County Governing Bodies, county and elementary schools, the Councils and Senates of the Colleges, Jesus College, Oxford, and the University of Wales, with six co-optative members—eighty in all. Viriamu Jones thought it a mistake to call into existence a second body, since the University had been empowered by Charter to undertake the very functions assigned to the Central Board. Sir John Rhŷs expressed a similar opinion, and wrote to the Welsh newspapers hoping to impress the Welsh people with the question, before Parliament agreed to the creation of the new body.

A section of the educational world in Wales, while in substantial agreement with this view, feared however to offer any opposition to the Central Board scheme lest the Government should, as an alternative, propose to place the schools of Wales under the official direction of Whitehall. Viriamu Jones did not share these fears; early in 1896 he went to London in the hope of discussing the question with Sir George Young, whom he missed, and who wrote :

DEAR PROFESSOR JONES,—I am sorry I missed you this morning.

I heard from Mr. Ivor James of the movement for making the University of Wales the provincial authority in Secondary Education, and deprecate it, first, because of the danger from political chances, when it is found that the scheme for a provincial authority in Wales on which the County Bodies and Charity Commission had agreed is to be pulled to pieces in the house of its friends; secondly, because I do not think University authorities, acting as such, are the right authorities to control secondary education. Secondary education is that which is best for students of whom a small minority will go to the University, the great majority having other destinies. Therefore, while the culture of University men, and their outlook over the educational

field, make their presence more important perhaps than that of any other single element in composing the authority for Secondary Education, they ought, in my opinion, to be one element of (I do not say many, but) several—two or three at fewest—and they ought not, acting *ex officio* as University authorities, to be supreme. The argument is made stronger for me, in my view, by Mr. James's reply—'The University of Wales is *not* all composed of University Dons.' I could trust the professional better than the amateur Don, in such a matter.

Are you quite sure that this Government will hold themselves bound to give you a provincial authority at all, when the scheme is discredited? In Mr. Bryce's report, County Authorities are left supreme, except for Central interference, contrary to the plan which found favour in Wales. How if Conservatives say, 'Let us take advantage of the opposition of Welsh Liberals in the University to defeat this scheme, and of the Liberal Commission's Report, to set up *no* central educational body'? They may well expect, as time goes on, to be influential in several of the *counties* again—but hardly in Wales.

I recognise the force of the argument 'too much machinery.' I would have left out the County Governing Bodies—but the form of the Act rendered them necessary, and they are, it seems, a fatality in England also. But the argument is, anyhow, *not good enough*, I venture to think, to justify the very considerable political perils of your present course. I suppose this argument may have weight with you. My other, that the *educational* benefit of your success is questionable, I commend to your charity.

Yours very truly,

GEORGE YOUNG.

Mr. Humphreys Owen was very much of the same mind as Sir George Young on the danger of opposing the scheme for the formation of a Central Board. Principal Reichel, after a conversation with him, wrote to Viriamu Jones on February 7:

I was talking over the question of the Central Board with Mr. Humphreys Owen last Wednesday. It appears that what he is afraid of is that if we shelve the Central Board, the permanent officials in London will seize the opportunity of recapturing our intermediate system and will not again let it go out of their hands. This apprehension has been produced on him by remarks let fall by certain influential officials.

At the same time he admits that there is force in the argument that a second national body for educational purposes would

almost inevitably drift, however unconsciously or unintentionally into an attitude of antagonism towards the Welsh University. I pointed out that the object of those who are opposing the Central Board was not to substitute for it a body differently constituted so much as to bring the two into harmony with each other, and that this could easily be done by the formation of a Syndicate the composition of which might be determined by a Statute of the University. We should then have precisely the same body as it is proposed to call into existence by the Central Board Scheme, but acting in harmony with, instead of in opposition to, the University. He suggested that this might be brought about by allowing the Central Board Scheme to pass, with the understanding, however, that an amending scheme should be brought in shortly after, making it a Syndicate of the University. I see the matter comes up for discussion at your Court of Governors next Wednesday, and I have therefore thought it well to write to you the tenor of our conversation. I have great faith in your judgment and foresight, and I am sure that if any effective way can be found for smoothing the transference from the Central Board to the University Syndicate, you would be the first to welcome it. I mention the suggestion of Mr. Humphreys Owen as a plan which, to me at least, is new, and would only ask you to consider, before your Court comes to a final decision, whether it is workable.

A copy of this letter went at the same time to Mr. Humphreys Owen, who replied to Viriamu Jones that his objects were (1) to protect Welsh Intermediate Education from falling under the control of London, and (2) to give to those engaged in it direct and immediate power over, and responsibility for, its organisation and methods. He feared that both would be endangered if the University united with other hostile interests in opposing the Central Board Scheme.

Meanwhile, the Principal had expressed his views to a meeting of the Intermediate Governing Body at Cardiff on February 4 :

There appears, he said, to be some misapprehension on this question of the Central Board. The scheme was one drawn up at Shrewsbury by the Conferences there, and formulated before the University of Wales came into existence. Side by side with the plan for examining and inspecting the Intermediate Schools by that Central Board there was growing up the plan for the Welsh University, and it was not known which of them would

come into existence first. No one knew that the Welsh University would come quite so soon. We have, in fact, two great educational parliaments called together from all parts of Wales, and the question arises, Is it worth while to bring two such parliaments into existence, because the Central Board would minister to the Intermediate Schools, whilst the University would minister to the Colleges? Why not join the two? That has been in the minds of educationalists and has been the subject of reiterated resolutions. The Welsh University Charter and the Central Board Scheme both definitely state that in matters of academic study Wales is to look after itself as one province. Why—in connection with things so closely related as University education and education in Intermediate Schools—weaken the large assembly by bringing into existence two bodies which would consist very largely of the same men? They no doubt want two Executive Committees, but I think it is courting failure to create so many large bodies. I do not see how people in Wales are going to be able to travel so frequently as the meetings would demand. The Central Board is not yet in existence. The University Court has been in existence and at work for two years. I suggest that the Governors should be furnished with an analysis of the Central Board Scheme and of the University Charter, so that the subject can be discussed at another meeting.

Sir John Rhÿs, as has been said, was one of those who opposed the formation of the Central Board. On February 6 he wrote to Viriamu Jones :

I am communicating to-day to Lord Pembroke and the two burgesses of Oxford University a petition of the College praying them to urge the Government to use their influence to have the Central Welsh Board Scheme withdrawn as soon as may be.

Two days later he wrote again :

In stirring up our friends [of Jesus College] I am pressing on their consideration the fact that the *best* thing to do is that they should bring pressure on the Government *to have the whole scheme withdrawn*. In this I am acting according to advice that the fact of your disapproval of the scheme will render it unnecessary to have very much pressure brought to bear on the Government.

A fortnight after this, at a meeting of the Court of the University at Shrewsbury, Viriamu Jones again referred to the Central Board Scheme :

Nothing is further from my idea than to discount or undervalue the work of the Shrewsbury Conference of Joint Intermediate Education Committees or to render its work of



no effect. In truth, without that work the proposal I have the honour to bring before you could not be made in the explicit form in which I now submit it. The Central Board Scheme provides for the discharge of the following functions : (1) The administration of certain funds to be expended (*a*) on scholarships and exhibitions tenable at intermediate schools, (*b*) on the training of teachers ; (2) the inspection and examination of schools ; (3) the organisation, in concert with the county governing bodies, of a pension scheme for teachers ; (4) giving advice and information in regard to school apparatus, and, if desirable, making provision for supplying it ; (5) the arrangement of conferences of governing bodies or teachers. The machinery to be brought into existence under the scheme consists of the Central Board of eighty members, an executive committee, and a chief inspector. The executive functions of the Board are, by the scheme, to be discharged by an executive committee under regulations to be framed by that committee and approved by the Board. The actual functions, therefore, to be discharged by the Board are—as is usually the case when a body is large and representative of so wide an area—of the legislative order. Since the Conference of Joint Intermediate Education Committees met and formulated the Central Board Scheme, the University Court has come into existence. Having regard to its representative character, the Court might fairly be described as a Welsh educational parliament, and might with substantial advantage be substituted for the large and representative legislative authority called into existence by clauses 3 and 7 of the scheme, the scheme being left otherwise unaltered. The question before us is whether Wales is to be finally committed to the policy of having two such educational parliaments rather than one which shall be the organised expression of the intellectual life and educational opinion of the Welsh people. The first resolution is intended to make it clear that we are all agreed in thinking it of paramount importance that the functions for the discharge of which the scheme provided should be performed by a Welsh representative authority. And the third resolution instructs the Welsh members, in giving effect to any conclusion at which the Court may arrive, to bear in mind that it is not desired to bring the scheme, as it at present stands, into peril. Our conviction is that the passing of these resolutions as a whole will remove all such peril, for the result would be the recognition of the view that the sanction of the Crown should be given to the scheme as it stood—that the Central Board should be allowed to come into existence, but that it is desired that it should be understood that it is not a final expression of opinion on the part of Wales in favour of the permanent existence of two such legislative bodies rather than of one educational parliament such as we have in the University Court.

In spite of correspondence and discussion, it seemed as if nothing like general agreement could be arrived at in Wales on the question of the Central Board. Even among the different bodies interested there was internal discord.

Viriamu Jones had an interview and further correspondence with Sir George Young, who wrote in February 1896 :

DEAR PRINCIPAL JONES,—If I seemed too vehement in my onslaught on your pet proposal, I trust to be forgiven, for I think you knew it was because I was seriously alarmed at the danger to the scheme, and with it to the principle of a Central Board for Wales.

But look, now, at this. No board is, in the long run, stronger than its strongest man. You are as likely as any man alive to be the strongest man, either on the 'Board' or 'Court.' Yet you let slip all the opportunities afforded by publication of the scheme for getting your ideas considered. Why? *Because* of your preoccupation with the business of founding a Welsh University! What happened when both were to be founded may easily happen when both are only to be administered.

On March 13 the County Governing Bodies of Wales and the University Court met at Shrewsbury, when the question of the Central Board was again discussed. Viriamu Jones, speaking at this meeting, put forward a strong plea for unanimity. There was, he said, real division of opinion as to whether the educational system of Wales should be governed by the University Court or the Central Board. If those of them who, although believing that in the highest interests of Welsh education the governing body should be the University Court, refrained from pressing their views, it was only because they feared to endanger the one principle of paramount importance upon which he believed they were all agreed—namely, that the governing functions should be in the hands of a Welsh representative body. He appealed for equal consideration from the other side, more especially as he was afraid that the county governing bodies who had already made up their minds on the matter had done so without having heard the merits of the case argued. He wished that the scheme as at present proposed should not be regarded as a closed book, and also to place

their members of Parliament in a position to tell the Charity Commissioners that they must be prepared to hear and consider any conclusion that Wales might come to at a future date.

He attached very great importance to unification. In having two bodies instead of one, if it were to become permanently part of their system, he believed they would be missing a great opportunity.

It would be the old mistake, he said,—division, division, division, and they would have two bodies, each the weaker because their functions were not joined.

In the end the strongly different views held by Humphreys Owen and Viriamu Jones did not prevent their arriving at a compromise in favour of the Central Board Scheme, inasmuch as it secured the control of Welsh intermediate education by a Welsh body in Wales ; and when the Board was instituted, Viriamu Jones became its first Vice-Chairman, Humphreys Owen its Chairman.







*William James*

*From a photograph by W. D. Dighton*  
1896

## CHAPTER VIII

### THE UNIVERSITY OF WALES

‘ Scatter iron filings on a sheet of cardboard, they will fall irregularly without trace of ordering. Bring a magnet beneath the cardboard, and they will arrange themselves in curves so harmonious and beautiful and mysterious that one never wearies of watching.’ That’s the tale; the application? The iron filings are the educational institutions of Wales; and the University, if it plays its part aright, is the magnet that shall link them into orderly system.—*Viriamu Jones* (Address to the Welsh National Society of Liverpool, November 1895).

THE movement for the establishment of a University in Wales is not of modern growth. It is related that in the reign of Henry IV, Owen Glyndwr, in preparation for his great effort to establish the political independence and the religious and intellectual freedom of his countrymen, ‘ wrote to the King of the Scots in French and to the Lords of Ireland in Latin,<sup>1</sup> and finally, sending ambassadors to King Charles VI of France, formed an alliance with him. In his negotiations and correspondence with the King and with Peter de Luna (the schismatic Pope who was recognised by France and consequently by Glyndwr as Benedict XIII) he stipulated for the acknowledgment of the primacy of St. David’s—in other words, for the emancipation of the Welsh Church from the jurisdiction of Canterbury, which refused to acknowledge the schismatic Benedict; and he asked the Pope to establish two Universities, one in North and the other in South Wales. The rebellion he led was crushed; but the ideas for which it stood lived on, the common inheritance of the Welsh and Irish peoples.

<sup>1</sup> *The University of Wales*, by Cadwaladr Davies and W. Lewis Jones, 1905, chap. iii.

Tradition tells that Henry VII granted a Charter to Lleison, the Abbot of Neath Valley, 'to set up there a University, the like of Oxford, for the benefit of the Welsh.' But though the Abbots of Neath enjoyed a high reputation for learning and piety, there is no evidence to support this tradition. Undoubtedly some higher educational institution was badly needed. In the absence of a cultured class, the Church even had to ordain mechanics, and a century later (in 1646) Richard Baxter made several attempts to persuade some rich Welshmen to found a 'Colledge as would containe a hundred students,' in which to educate ministers of religion for Wales. He subsequently corresponded with Oliver Cromwell on the same question; and a letter written about ten years later by Richard Baxter on the subject of a University for Wales (found in manuscript in the Red Cross Street Library) was read in 1865 and afterwards reprinted by the Committee of Welshmen working then to found a University.<sup>1</sup> The need for a better training for the Christian ministry inspired among all classes of their countrymen the idea of founding institutions for higher education.

The theological colleges established in connection with the Nonconformist bodies, both from lack of means and from an inadequate conception of education, could hardly be considered as institutions of University rank. St. David's College, Lampeter, founded by Bishop Burgess in 1827 and incorporated in 1828, had only obtained powers to give the degrees of B.D. (1852) and B.A. (1865). Nevertheless, it was through the work of Lampeter and the other theological colleges, that Welshmen came to see the need for a liberal culture and the necessity for a liberal education.

The movement which resulted in the establishment of the Aberystwyth College represents the first, and by far the most arduous, stage of the long endeavour to give practical embodiment to the University idea. The founders of that College aimed at giving Wales a national degree-giving University, but encountered so many difficulties that they had to content themselves with an institution whose function

<sup>1</sup> *A Sketch of the History of the College from 1863 to 1891*, by T. F. Roberts, LL.D., Vice-Chancellor, University of Wales, Students' Handbook, 1909.

never rose above that of preparing for the degrees of the University of London.

In this movement two names stand out pre-eminently : that of the Rev. Dr. Thomas Nicholas of the Presbyterian College, Carmarthen, and of Sir Hugh Owen. In 1863 Dr. Nicholas wrote :

The direction of our large and lucrative undertakings, the chief posts in the country which require superior skill and attainments, are monopolised by strangers. The Welshman has to struggle in an unequal race, and is necessarily left behind. Let Wales have two thousand of her sons under daily University training (about the proportion found in Scotland) and a different result will follow. To meet this national want a provision truly national must be made. Colleges must be formed for the education of the *nation*, and, in order that they may awaken no sectarian or party antipathies, they must be perfectly free from all sectarian or party preferences. It is essential to success that all classes and all denominations should join hands in the work. A University for Wales must embrace the whole Welsh people, and must clash with no existing educational institutions.

Sir Hugh Owen, with indomitable enthusiasm and persistence, worked for the foundation of Aberystwyth College and its maintenance by subscriptions from the people. He repeatedly brought forward in Parliament the needs of Welsh education, until in 1880 the Departmental Committee of Inquiry 'into the present condition of Intermediate and Higher Education in Wales' was appointed. This Committee reported that :

The existence of a Welsh University would almost certainly exercise a beneficial influence on higher education in Wales. It would bring such education more closely home to the daily life and thoughts of the people. . . . It might, under favourable circumstances, tend to develop new forms of culture in affinity with some of the distinctive characteristics of the Welsh people.

As has been seen, in his first public address to his students at Cardiff, Viriamu Jones expressed his conviction as to the imperative need of a Welsh University. The University constitution he then described in outline, anticipating in all essential points the actual constitution given to the University of Wales ten years later.



The teaching of the University differs from the teaching of the school in two respects—in its method and its matter. In its method the student is left freer; he is more independent. . . . He must not be compelled to learn; must be led, not carried. . . . As time goes on the student will find himself, more and more, singling out one department as of chiefest moment to him, studying others, not so much for their own sake as for the bearing they have on the department of his choice. . . . Colleges are being founded in towns widely separated from one another, and it has become necessary not to leave them without the power of conferring degrees upon their students, while it is still inadvisable to multiply too largely the degree-giving corporations of the Kingdom. A University of this kind, with affiliated Colleges in places apart, will not be able to do the main part of the teaching as one corporate body: this function will have to be discharged by the individual affiliated Colleges. . . . Many are opposed to the multiplication of Universities on the ground that the only function of a University, as distinguished from Colleges, is to examine; hence they suggest a national University to examine students from all Colleges in the Kingdom. . . . If examinations are to serve their purpose they must not be too unalterable, in which case they kill originality of teaching, and yet they must be rigid enough to afford a measure of guidance to those who need it. This compromise may be effected by a close connection of the examining body with the teaching body, together with a proper representation of other Universities by the appointment of external examiners. My opinion is that when the Welsh University is constituted the examining board ought to consist partly of the professors of the various colleges and partly of external examiners.

Viriamu Jones hoped that the University would come into existence at the same time as the Intermediate Education Act, if not before, in order that the intermediate schools to be formed under the provisions of the Act should not be without the standard which the University would set and the guidance which it would afford.

At the opening meeting of the Cambrian Society of South Wales, in the spring of 1885, he further developed his definition of the functions of a University.

These were (1) to teach; (2) to examine, conferring the degrees and diplomas on successful students; (3) to encourage original investigation in all branches of knowledge; (4) to influence and control the intermediate education of the country. If they considered the English Universities they saw that

English Schools were influenced by them in three ways. (1) The work of the school was necessarily made preparatory to the work of the university, since the success of the school was largely estimated by the subsequent careers of the boys sent from it to the university. Hence the scholarship standard of the university was the aim of the schoolmasters in teaching, the scholarship standard itself being controlled by the nature of the university examinations; (2) owing to the Oxford and Cambridge local examinations, many schools which did not send more than a very few boys to the university could nevertheless point to success in the Oxford and Cambridge local examinations as a testimony to their efficiency; (3) by their system of school examination the school was examined by an examiner appointed by the university, who subsequently issued his report. Hence the university performed really the work of inspection.

The first practical step towards the establishment of the University was taken in September 1886, when the Principals and Senates of the three national colleges met at Shrewsbury and discussed the question. It was then decided to hold in the future a series of conferences at which resolutions should be passed and conveyed to the Government and to the Welsh members of Parliament.<sup>1</sup> During these conferences the plan for a University took definite form and was placed on a practical footing.

The largest share of the work of the Conference naturally devolved upon the Principals of the national colleges: and the continuous progress and successful results of the long series of deliberations, leading to the completion of the University draft scheme in little more than five years, was due in the first place to their joint aims and their co-operation.

The opening of the University College took place at Bangor in 1884, a year after the establishment of the Cardiff College. Viriamu Jones was present at the ceremony: for him it was a visit of friendship as well as an occasion of national rejoicing. Principal Reichel and he had been undergraduates together at Oxford, and on the eve of his

<sup>1</sup> It was at one of these conferences that Mr. Owen Owen (then head master of the Grammar School at Oswestry, now Chief Inspector to the Central Welsh Board) suggested the institution of an Education Department for Wales, similar to the Scotch Education Department and equally independent of the Education Department at Whitehall.

appointment at Bangor Mr. Reichel had come to Cardiff to consult Viriamu Jones. From this time onwards unity of aim in their work strengthened the bond of friendship between them. Another friend, Cadwaladr Davies, was also at Bangor; he gave invaluable help to the new College before its establishment, and afterwards as its Registrar. Endowed with a rare nobility of nature, he was the most chivalrous of friends. Keenly interested in literature and art and susceptible to the beauties of nature, he left all to bear his part in the hard work of ordering the details of University organisation. Cadwaladr Davies died before his time and

If beyond the shadow and the sleep  
A place there be for souls without a stain,

Then none of all unsullied souls that live  
May hold a surer station; none may lend  
More light to hope's or memory's lamp nor give  
More joy than thine to those that call thee friend.

There was a bond of union, too, between Cardiff and Aberystwyth. In Aberystwyth College Lord Aberdare had long been interested and was for some years President of its Council while Vice-President at Cardiff; and in remaking her constitution, Aberystwyth took that of Cardiff College as its model. Lord Aberdare wrote in October 1890 to Viriamu Jones:

The opening ceremony at Aberystwyth fell through. All the big guns were otherwise occupied—so they have postponed it till next spring. But I am glad that I went there. I spent  $7\frac{1}{2}$  hours in the Chair, with an hour for lunch, mostly debating the Statutes, which were copied from those of Cardiff both at Council and Court. The new buildings are quite magnificent.

Some letters from the Rev. T. C. Edwards, Principal at Aberystwyth, to whose strenuous work the College owed her recovery from the calamitous fire of 1885 and relief from many other difficulties, show his interest in the suggested Conference and Viriamu's hope that he would bring the help of his experience to its meetings.

This bond between Cardiff and Aberystwyth was further strengthened when the present Vice-Chancellor of the University left the Chair of Greek at Cardiff in 1891 to become Principal of Aberystwyth. Thus when the Conference was called the Principals of the three colleges were prepared to join together to promote the common end.

In April 1887 Viriamu Jones addressed the Cambrian Society on the functions and organisation of the Welsh University.

The university must be responsible for the good teaching of the graduate as well as for his examination. This will do away with disastrous cramming, for this danger is minimised when the examining body insists beforehand that the person to be examined should have had sufficient teaching of such quality as to make cramming a superfluity of naughtiness. The University of London began with a number of affiliated colleges, but now its degrees are thrown open to all the world, so that it only guarantees that a graduate has passed an examination. The sole exception is the degree in medicine, for which candidates are obliged to study a certain time at one of the London hospitals. This objection—that the degree does not guarantee good teaching—has led Owens College at Manchester to demand a university charter. In my opinion the Welsh University would do well to make good teaching an essential feature. It will, of course, be impossible for the university to do all the teaching, as is done in Germany, and at Oxford, Cambridge, Edinburgh, and Glasgow : in Wales it must be done by the individual colleges. In regard to the course of study, there is the time-honoured division into faculties, and as a beginning I would suggest the following branches—arts, science, divinity, law, medicine, and engineering. Each college need not teach all the subjects ; for instance, the University Colleges would find it impossible to teach divinity, which must be relegated to the theological colleges ; and in engineering, Cardiff would probably stand alone. Then the University Colleges might provide departments for the training of elementary teachers, and this important work could be done by the foundation of a number of Queen's Scholarships. This scheme has been very warmly taken up by the Cardiff School Board, and the Chairman (Mr. Lewis Williams) was requested by the Royal Commission<sup>1</sup> to give evidence upon this very point about a month ago. Good teaching could be ensured by the

<sup>1</sup> The Royal Commission of 1886 appointed to inquire into the working of the Elementary Education Acts in England and Wales, of which Sir R. A. Cross (afterwards Lord Cross) was chairman.



university insisting that the colleges should rigidly follow its regulations, as it would be ultimately responsible not only for the examination, but for the training of the graduates. The examining boards ought to be connected with those engaged in tuition, and should consist partly of professors from the various colleges, partly of external examiners. The latter should set the papers in each subject, and the whole board look over them. I hope that theological examinations will be found practicable, for the fact of a common centre for the granting of divinity degrees would do much to allay the jealousy and irritation which occasionally prevail between members of different religious bodies. If the university were also to guide intermediate education, there should be some system of inspection, and this could be far better accomplished locally than from London. The constitution of the university should include the Queen or the Prince of Wales, a governing body representing the Crown and affiliated colleges, and a convocation of the graduates of the university. Such a governing body would command the confidence of the Welsh people, and I hope that the Welsh members will take up the university question.

On August 10, 1887, Viriamu Jones was asked to open the discussion on education in the Cymmrodorion Section of the Eisteddfod meeting which was held this year in London. Part of his address relating to the training of elementary teachers has already been quoted.

He also said :

This method of bringing the colleges into relation with elementary teachers leads us straight to the necessity of founding the Welsh University at the earliest opportunity. Intermediate education also points the same way, and it may be said that in everything concerned with Welsh education 'the growing need of some higher educational authority than any at present existing in Wales, points to an organisation of a completing kind, binding together what is at present, more or less, separated and individual educational work. The Welsh University is needed to give unity of purpose and consolidation of result to Welsh educational effort.'

After describing what he thought the constitution of the university should be, and outlining the scheme already indicated, he concluded :

The University I picture to myself is a University teaching



in many faculties through its colleges, and satisfying itself that each of its colleges is efficient in the faculty in which it is affiliated. I go further, and say that at present we are an over-examined people and that the bloom of originality is too often rudely brushed from an original mind by our examination system ; and in the University I try to build in my imagination, mere examination plays a less important part than is customarily the case in England—but not in Germany—at the present day.

It is sometimes said that the Welsh are an ancient people, with a strong hint that as a race, with separate characteristics, they are drawing, or ought to be drawing, near their end . . . and that the most graceful thing the spirit of our race can do is contentedly to attain Nirvana in the larger and, it is to be presumed, diviner current of English life. . . . It must indeed be admitted that we are an ancient people, for the generations of Britons and the legendary heroes are very distant, but where are the signs of a drooping spirit of national weariness ? Do we not, on the contrary, discern in Wales to-day the pulsating strength and elastic vigour of new and exuberant youth ? There is the thorough-going, buoyant political enthusiasm that has not learned the need or value of political compromise. A vivid and ambitious intellectual awakening is finding voice in the loud demand for a better and more complete system of national education. . . . No, Cambria may be old, but her face is not wrinkled, neither is her eye dimmed. The truth is, she has been slumbering through the centuries preserving the hues of her youth, and the zenith of her intellectual maturity belongs to the future.

Discussion followed, and the Cymmrodorion Section passed the following resolution, which was proposed by Professor John Rhŷs and seconded by Sir Lewis Morris—‘ That it is the opinion of this meeting that definite action should be taken to impress on Her Majesty’s Government the desire of the Welsh people for the establishment of a Welsh University.’ It was further resolved—‘ That a conference of representatives of colleges, intermediate schools, and elementary schools should be summoned in a convenient place in the near future, and that the Society of Cymmrodorion be requested to take the initiative in convening it.’

This conference was accordingly summoned to meet at Shrewsbury in January 1888. It sat for two days and passed the following, besides other, resolutions :

(a) That in the opinion of this conference it is expedient that the provision for intermediate and collegiate education in Wales and Monmouthshire should be completed by a University organisation, and (b) that the inspection of state-aided intermediate schools should be committed to the Welsh University, due provision being made for the representation of such schools on its executive body ; (c) that the executive committee should be requested to make arrangements to enable the members of the conference to meet the Welsh peers and the members of Parliament for Wales and Monmouthshire, at an early date.

In February 1888, Sir Isambard Owen wrote to Viriamu Jones :

Rhŷs was with me on Saturday. He agreed with me that to you must be committed the explanation of the University question, which you have worked out so completely and clearly. Perhaps the Archdeacon might speak for the 'Teaching of Welsh' and the Warden of Llandovery for another part of the programme. Also Professor Ellis Edwards should be requested to speak.

Prof. Rhŷs spoke to me on another important matter. He thought it would be most advantageous if you and Reichel could draft an illustrative University Charter as soon as convenient, so as to give those whom we expect to take the subject up something definite to look at. If Principal Edwards [of Aberystwyth] could be joined, so much the better : but would he ?

The conference with members of Parliament took place on March 16, 1888.<sup>1</sup> The views of the Shrewsbury conference were laid before them, Principal Jones being one of the speakers, and assurance was given that they would receive careful consideration.

Two days afterwards Sir Isambard Owen again wrote :

It seems to me important now that we should push on with the preparation of a draft University Charter, so as to get it completed and adopted in Wales before English politicians have time to get a finger in the pie.

Is there any chance of getting Principal Edwards to join in getting out the first draft ? If not, you and Reichel will be able to manage it.

Then about a Conference to consider it. When do you

<sup>1</sup> The following account is to a great extent quoted from Viriamu Jones' Address to the Welsh National Society of Liverpool, 1895, which is reprinted as an Appendix, p. 373.

think such a meeting might be summoned, and to what extent should it go? Will it be necessary to call the full Conference together again, or could a Charter be settled by the Collegiate element and the Head Masters of the larger schools?

In the early part of July 1888, a conference, representing the three University Colleges, met in London and passed the following resolutions:

That this meeting, representing the three Welsh University Colleges, is of opinion that the time has come when these colleges should conjointly apply to the Government for a charter for the establishment of the University of Wales.

That an application be made to the Government for a charter to constitute a University of Wales on the same general lines as the charter already granted to the Victoria University, with such modifications as may be required by the peculiar conditions and circumstances of Wales.

In the course of this London discussion a difference of opinion revealed itself. It was held by some that the degree examinations of the Welsh University ought to be, like those of the University of London, open to all comers; by others, that the degrees of the University ought to imply not only success in examination, but adequate training for a definite qualifying period in a constituent college of the University, as is the case in all the Universities of England and Scotland, the University of London excepted.

In the event, the above resolutions were passed and submitted to the Lord President of the Council on July 15. They were courteously received, but clearly the Government was as yet unconvinced. The deputation was, however, invited to prepare a draft charter for submission to the Government in the future.

After this there was a period of delay, owing to the differences of opinion as to the nature of the University. It was rightly felt that further thought and discussion would result in substantial unanimity.<sup>1</sup>

<sup>1</sup> It should perhaps be mentioned in this connection that in 1890 the London University sought parliamentary authority to carry into effect a reconstruction which had been under consideration for two or three years past. By the scheme proposed, the provincial colleges were to have increased representation on the governing body, while in return

On the one hand, it was urged that the University ought to be responsible for the good teaching of every graduate, as well as for examining him ; that the University degree ought to be a guarantee of good training as well as of a successful exhibition of knowledge in particular examinations ; that in connection with all examinations there is a danger of ' cramming ' and that this danger is minimised if the examining body insist beforehand that the person to be examined shall have had sufficient teaching of such quality as to make cramming unnecessary.

On the other hand, it was pointed out that there would be a large number of meritorious students too poor to afford a collegiate training, who would lose the stimulating hope of graduation if a qualifying period of study at a constituent college of the University were made a condition precedent to admission to the University examinations.

The rejoinder was that such students should be provided for by a scheme of scholarships ; that their real need was University education, which could only be obtained at a properly equipped college ; and that to offer them anything else was to give them stones for bread. It was also argued that the University of London already made provision for such students ; and that the Government would be little likely to establish another University to do the same work.

But the difference of opinion was there, and it was well that the solid weight of argument in favour of a teaching University was left to produce its effect before any further step was taken.

In May 1891, the Rev. Ellis Edwards, who had recently proposed an important resolution at the Court of Governors

for their support and co-operation they were to be accorded certain privileges in regard to the exemption of students from particular examinations, etc. This increased representation was not, however, in proportion to number of their students taking London degrees. The question for the provincial colleges was whether they would sacrifice, or at any rate prejudice, their future freedom of development by the acceptance of these conditions. For Wales, still awaiting her own University, the problem was a complicated one. Viriamu Jones was convinced that nothing short of a University would meet the needs of Wales. He carried on a long correspondence on the subject with Sir George Young, Professor Silvanus Thompson, and Principal Heath ; and Sir George Young wrote : ' Your letter was a material help and I am very grateful to you for writing it.' In the end the scheme was rejected.



of the Bangor College (it was seconded by the Lord Bishop of St. Asaph and passed), wrote to Viriamu Jones :

You may have seen that Bangor University College has appointed a Committee to consider again the means of obtaining a degree-conferring University for Wales, and is to invite the help of Committees appointed by Cardiff and Aberystwyth.

We have had one sitting, and have declared our opinion that the University should be one, should insist upon teaching and attendance at lectures, and should also consider it an essential part of its work to spread the benefits of University education by some such means as those employed in the University Extension Movement. This last proviso meets the difficulty which divided us when our undertaking failed, and with this addition to our scheme I trust we shall be able now to agree, and that we shall have your valuable assistance. Our Committee numbers about eight. Would you kindly see that that number (the Secretary will probably give you the names) is chosen by your College, and arrange that the selection shall be as representative as possible ?

But there was no new conference until November 8, 1891, when, as a result of the Bangor resolution, representatives of the three University Colleges, and of the Joint Intermediate Education Committees of the Welsh counties, met at Shrewsbury. By this time opinion in favour of a teaching University had greatly ripened, and the first resolution of the Conference was as follows :

That the University of Wales shall be a teaching University, i.e. that no candidate shall be admitted to a degree unless he shall have pursued such a course of study at one of the Colleges of the University as the University Governing Body may prescribe ; and that the teachers, or any one or more of them, in each faculty in each college of the University, shall have a substantial share in the original framing and any subsequent modification of the curriculum and scheme of examination.

This resolution was passed unanimously. After that, progress was assured.

The following resolutions were also passed :

That the colleges in the University shall be the University Colleges at Aberystwyth, Bangor and Cardiff ; and such other colleges as may hereafter, with the sanction of the Crown, be recognised by the University Governing Body.

That powers be sought, enabling the University to give degrees in arts and science, and subsequently in such other



faculties, including theology, medicine, law, and music, as may be sanctioned from time to time by the Crown at the request of the Governing Body.

That in order to secure the speedy establishment of a University on these lines, a committee consisting of four representatives from each of the bodies composing the conference—the representatives to be nominated by the respective bodies—be appointed to prepare a draft charter of the University, and to submit the same to a subsequent meeting of this conference.

Few documents of similar nature were ever more fully and minutely considered than the draft of the Charter. Its main lines were laid down by a public conference held in the autumn of 1891, its every detail was anxiously discussed by a representative Committee in a series of meetings which extended through the greater part of the succeeding year; and it is somewhat remarkable that, although the earlier meetings had appeared to show almost irreconcilable antagonisms of opinion on essential points, the scheme which eventually emerged from these laborious discussions was one which had gained not merely the acceptance, but the cordial approval, of nearly every member of the Committee. It was referred by the Committee to the original Conference; by the Conference it was remitted to the Colleges, to the sixteen County Councils of Wales, to the Press, and to the public, and it was the subject of discussion in numerous meetings and in the newspapers from end to end of Wales for six months before a draft was laid before the Lord President of the Council for acceptance. From this ordeal, and from the further scrutiny of legal advisers and of a Committee of the Privy Council, the scheme emerged unscathed, and, save in a few minor points of detail, the Charter which passed into law in November 1893, is identical in its provisions with the scheme which was framed and submitted in the preceding December by the Charter Committee.<sup>1</sup>

The divergent opinion of Dr. R. D. Roberts cannot here be passed over. At the conference in January 1893, he brought forward an alternate charter in which residence was not a necessary qualification, as, in his opinion, this would exclude the poorest students whom he considered most needed education.

To explain his scheme took some time; but, being defeated clause by clause, by twenty-one votes to two, Lord Aberdare at last suggested it was useless to fight it

<sup>1</sup> 'The University of Wales and its Educational Theory.' An address delivered to the Teachers' Guild of Great Britain and Ireland, by Dr. (now Sir) Isambard Owen, M.A., M.D., 1898.

further there. On August 29, 1893, Mr. Bryn Roberts, in the House of Commons, moved a resolution in favour of Dr. R. D. Roberts' scheme, but the motion, after discussion, was negatived without a division.

In the autumn of 1892, the Government appointed Mr. O. M. Edwards of Lincoln College, Oxford, to report on the condition of the colleges in relation to the proposal for University organisation. In September, 1893, Viriamu wrote :

The University Charter is safe. So a new and great chapter begins in Welsh educational history. It is much to have been permitted to be no insignificant factor in bringing it about.<sup>1</sup>

On November 23, 1893, the Charter of the University of Wales was signed by the Queen in Council.

Thus the dream of generations of Welsh educationists began to be a living reality, and Viriamu Jones's name must ever be closely associated with this great event in our national history.<sup>2</sup>

Intimately bound up with it are also the names of Lord Aberdare, Sir Isambard Owen, Mr. Cadwaladr Davies, Sir Harry Reichel, Principal Roberts, and Mr. Ivor James.

In January 1894 a deputation, representing the executive committee of the Welsh University Conference and the joint education committees of Wales and Monmouthshire, waited on the President of the Council of Education, in whose absence they were received by Mr. A. H. Dyke Acland, the Vice-President. To him they expressed their gratitude for the reception of their petition by the Privy Council and for the charter which very closely followed that adopted by the Conference, and Viriamu Jones emphasised the special thanks due to Mr. Acland, whose influence and sympathy and intimate knowledge of Welsh people had greatly helped to promote the success of their appeal.

Before the Conference was dissolved, one more task lay

<sup>1</sup> Viriamu Jones afterwards said with regard to this report : 'The Report was not published, but I have heard, on the best authority, that we have every reason to be grateful to Mr. O. M. Edwards for the service rendered by it to the cause we had in hand.'

<sup>2</sup> *Welsh Political and Educational Leaders in the Victorian Era.* Edited by L. Vyrnwy Morgan, D.D. P. 323. Article by Rev. D. Tyssil Evans.

before it : to draw up and submit to the Treasury a statement of the claims of the University to a parliamentary grant. It was estimated that to place the University in a sound financial position £8000 a year would be necessary, but that for the first year £3000 would meet expenses. The Conference therefore, on the following day, petitioned the Treasury for a grant of £3,000 for the first year and for such further annual grants as would be required. Sir William Harcourt replied to the deputation that the Government considered that the great object in view was well worthy the support they could give it by a grant of £3000, which, however, would be an act of generosity under the circumstances. He added lugubriously : ' It was one of the few things he had been able to grant to any body that year.' This grant was subsequently increased to £4000.<sup>1</sup>

On February 12, 1894, Viriamu Jones with Mr. Cadwaladr Davies, Mr. Maynard Owen (Parliamentary Agent to the Conference), and Mr. Ivor James, attended at the Privy Council Office on behalf of the Executive Committee of the Welsh University Conference, to discuss matters of procedure in connection with the forthcoming elections to the University Court and the probable date of the first meeting. Sir Charles Lennox Peel, Permanent Secretary, who received them, entered with the greatest interest into the subject ; and in February 1894, Lord Rosebery fixed April 6 as the date for the first meeting of the University Court of the University of Wales, and March 17 for the first meeting of the Guild of Graduates.

Thus the bodies created by the Charter came into existence, and upon them devolved the continuance of the work so well begun by the Welsh University Conference. The Chancellor and Vice-Chancellor, the members of the Court and the Senate, had to be elected ; the Finance

<sup>1</sup> The Government grant to the University and to the Welsh University Colleges amounted in all to £15,000, to Scottish Universities £42,000 per annum, besides considerable building grants ; indeed, according to the report of the Comptroller and Auditor-General, the total of the annual grants to the Scottish Universities amounted to £71,000 yearly, also that as recently as 1892 the Government had granted an additional sum of £40,000 in instalments to aid the building extensions of Aberdeen University.

Committee had to make its estimates and, first in importance, the curricula of studies and examinations to be drawn up. Viriamu Jones was unanimously elected Vice-Chancellor, and therefore presided over the deliberations of the Senate which at Sir Harry Reichel's suggestion, held its first meeting in 'the academic solitudes of Oxford,' at Jesus College.

Vital in influence as the work of these bodies must be upon the welfare of succeeding generations of students, and through them to the whole Principality for many years to come, much of it was yet to a great extent special and technical in character. For the academic members of the Conference the serious mental strife now began. The large Round Table compelled more thorough explanation and examination of every proposition in detail: each individual member must have time to ponder and decide on every point if unity of conviction were to evolve from wide diversity of view.

The constitution of the new University, as laid down by the Royal Charter, was identical in almost every respect with that drawn up by the Conference and presented to the Privy Council for their approval. It embodies the experience of the older universities of England, Scotland, and Germany, and modern educational ideals with their appreciation of the value of individuality, originality, and experiment. Its character is democratic: in the first article it is declared that women shall be eligible equally with men for degrees in the University, for every office and for membership of every authority, and the ultimate control of the University is entrusted to the Welsh people.<sup>1</sup>

Education [says Sir Isambard Owen] is a matter of public business in Wales to an extent that may seem strange in England and in a manner that would probably seem equally strange in France or Germany. We have few of the ancient endowments that have placed English education so largely in the hands of

<sup>1</sup> A story told of Mr. Gladstone illustrates the interest of the Welsh people in the University. He happened to be present on the occasion of the opening of the Cwm-y-llan track up Snowdon in 1892, and a speech was called for. When he got up on the platform erected upon a great boulder-stone, he seemed to hesitate for a moment as though searching for a fitting theme. 'Tell us something of the Welsh University,' cried out a Welsh quarryman in his audience.



private corporations. The requirements of national individuality and the subsidy of national education among us from local taxation have demanded local educational control ; in the absence of separate Departmental administration for Wales, education has in our country largely and frankly become a branch of local self-government ; and few public men in Wales are without experience of educational administration. The constitution of our University Court, in which the entire legislative and executive power of the corporation is lodged, though it may seem somewhat singular in English eyes, to us in Wales appears a simple and natural arrangement.

This University Court is a representative body and consists of 101 members. Of these 26 are named by the County Councils, 12 by each of the three constituent colleges, 13 by the Board of Education, 13 by the graduates, 6 by the Central Board of Intermediate Education, 3 by the head masters and mistresses of the public intermediate schools, and 3 by the head teachers of public elementary schools in Wales. The Chancellor presides. This board represents the general interests of Wales as against the special interests of the Senate, the Guild of Graduates and the staff and students of the constituent colleges. The Senate, equal in importance, consists of the heads of different departments of study and is presided over by the Vice-Chancellor. It advises upon all the academical work and upon the schemes of study and examination. It has no direct legislative or executive functions, but its advisory authority is amply secured. The Guild of Graduates, consisting of graduates and teachers, has two functions. Firstly, it elects thirteen members of the Court ; secondly, it is designed to ' be a bond of union among all the members of the University, past and present, to be an encouragement to the cultivation of learning among them.' For this purpose it was proposed to authorise it to administer independent funds and to undertake definite independent work. This clause, however, was eliminated from the final charter, but the Guild, inspired by Mr. Thomas Ellis, carries out its spirit in its supervision of the work of editing some of the ancient Welsh authors. Lastly, in the three colleges the actual teaching is given and the research work of the

University is undertaken. It is in the powers assigned to these bodies that the influence of Viriamu Jones can be clearly traced.

As already stated, he strongly disapproved of the autocratic control of the London University, under which the professors and tutors of the provincial colleges had little latitude of choice, but were required to arrange their teaching so as to fall in with the externally imposed curricula of the London University Examinations. The only way of obviating this was to allow the professors a voice in the framing of the curricula. Speaking on October 31, 1895, he said :

It will be the duty of the authorities of the University, in season and out of season, to bring home to the representative bodies of Wales that they must have faith in the University which they have called into existence. If Wales does not believe in its University, no one else will. Wales has a new power in the establishment of its University ; and new power brings with it new responsibility. Let us make our University what it ought to be, and let us never err by want of confidence in the national genius of the Welsh people and in our capacity to make our University respected throughout the Universities of the world.

We must believe in the efficiency of the colleges of the University, in the high standards of its examinations, and in the value of its degrees. We hear a great deal about the value of degrees. I have been concerned in the course of past years in many appointments, and I have never known a degree in itself to have much value. It is not the degree that is of value, but the training and ability implied by its possession, and public bodies have the common sense to go behind a degree. Some people think that a great many students come to Welsh colleges because they are able to get a very good training for the London degree. But I believe students come from a distance to Welsh colleges because they are able to get a very good and thoroughly intellectual training at a very moderate fee ; and I believe that the increased freedom they will get in the new university organisation will, if we embark freely and frankly in a course of confidence in ourselves in working for the degrees of the University of Wales, result in the number of students who come from a distance being not diminished, but increased treble and fourfold before many years are over, because of the advantages in intellectual stimulus that will be derived from the freedom of a teaching university. . . .

The object of those who were concerned in drafting the

charter of the University was first to ensure good teaching to its students throughout its colleges ; secondly, to give the teachers of the colleges such freedom as will enable them to give the students the best that is in them ; thirdly, to give the students—as far as is consistent with the duty of the University of guiding their studies—freedom of choice as regards the department of learning to which they desire to devote themselves ; and, fourthly, by those means to enable them to breathe a freer intellectual atmosphere and to take them away from the attitude in which they look upon their studies as so much preparation for examination, to a spirit of reverence towards the knowledge they are acquiring, and to awaken in them the sense that the duty and dignity of the scholar lies in free effort to prepare for original work in the department of his choice.

Each of the colleges is, therefore, entitled to propose its own plans of study and examination for its students as qualifications for the degrees and to propose modifications in them from time to time ; these proposals are to be submitted to the Senate, and the Senate will either recommend them to the Court for approval or refer them back for amendment. It cannot itself amend anything.

Viriamu Jones disapproved of the London University Scheme because it failed to secure to the students full initiative or freedom of choice.

A man is obliged to pass his matriculation in six subjects at once, and if he fails in any one, however distinguished he may be in the others, he is obliged to go back for a whole year.<sup>1</sup> A very great deal of time has been wasted in the last ten years in Wales by very meritorious students owing to this fact.

He pleaded for moderate university fees, so that poor students might not be handicapped.

The regulations for the arts degree were formed very largely in accordance with his views. The Faculty of Arts suggested a scheme on somewhat stereotyped lines, which did not at all meet with his approval.

Though himself a member of the Faculty of Science, he asked for special permission to address the Faculty of Arts on the matter, and so powerful and persuasive were his arguments that the regulations were recast.

<sup>1</sup> The London University has now altered these regulations.

The guiding principle of the scheme is freedom of choice of subjects with only such limitations as are essential to give efficiency. The student is permitted to construct his own scheme of study, only it must consist of at least nine courses spread over three academic years. In order to avoid the mere smattering of a multiplicity of subjects, at least three courses must be taken spreading over three years, and in at least three other subjects, two courses spreading over three years. He maintained that it was not so much the subject of study that was important as the earnestness and thoroughness with which it was treated. The scheme thus enabled the student to select subjects suited to his own natural gifts and useful for his future career.

The full freedom of choice was slightly limited by the fact that one course at least should be taken in Greek or Latin, and subsequently by the limitation that at least one non-linguistic subject is compulsory. One of the nine courses may be taken in a science. Professor Jones predicted that the results of the liberty given would be several well-defined groups of subjects such as the classical group, the English group, the modern language group, the philosophical group, the educational group, and his prediction has been to a very great extent fulfilled.

It must be admitted that the freedom of choice has been occasionally abused, but this has been a trifling evil compared with the great impulse given to study by the spread of liberty.<sup>1</sup>

In the Charter it was provided that no student could claim the right of examination by the University until his college was satisfied that he had 'diligently pursued and profited by his scheme of study' and had testified that he was 'of good character and conduct.' Further, the teachers themselves were among the examiners. There were also to be external examiners who were not members of the teaching staff of any of the constituent colleges, and to the external examiner was given the final decision on the student's success in the examination.

The problem as to what position was to be assigned to the theological colleges and to theology in the new University was a source of considerable perplexity. The later stages of the University movement were purely secular in their origin. Although Welsh education owed so great a debt to the Church and to the theological colleges which had

<sup>1</sup> *Welsh Political and Educational Leaders in the Victorian Era.* Edited by L. Vyrnwy Morgan. Article by the Rev. D. Tyssil Evans.



prepared the ground for the national colleges and therefore for the University, there was no recognised connection between them. The three national colleges of Aberystwyth, Bangor, and Cardiff were debarred by their charters from teaching theology, and on their side the theological colleges were not equipped to give a general University education. Some of them, it is true, from 1884, had sent contingents of students for the Arts course to the national colleges, leaving their own staffs free to devote themselves to theological subjects, but this was not the result of their concerted deliberations. Theology was, therefore, not included in the University curricula. In his opening address at the first Conference in 1891, Lord Aberdare, who was chairman, touched briefly on the question of theology :

There are many difficult questions—questions which we are not in a position to solve. Such are the questions of Lampeter College, the question of degrees in theology and others. We have thought it best to proceed more simply : to propose that the University should in the first instance consist of the three Colleges at Aberystwyth, Bangor, and Cardiff ; that residence at these Colleges should be required. . . .

The Dean of St. Asaph, on the other hand, urged that :

In Wales the one science of supreme interest and importance—a science second to none in educational value—is the science of theology. If you start a University without a faculty of theology you start a ‘one-horse affair,’ which will not arouse any enthusiasm from a large number of our countrymen. And then, as to the question of the three Colleges, I am one of those who hope that nearly every College in Wales will be a constituent part of this University.

Lampeter, particularly, he thought, had justified its claim to inclusion as one of the constituent colleges. Principal Reichel replied that

it was felt desirable to press the University question rapidly. . . . If we deal with the whole question of a theological degree—a question full of thorny points—we shall have practically no reasonable course open but to move for a Royal Commission to inquire into the whole question and make definite recommendations. We feel that the subject of the status of Lampeter and the other theological colleges is of such delicacy that we

should probably never agree at all. . . . Therefore, on the whole, it is thought more desirable to begin less ambitiously, to endeavour to establish the bare minimum of a University to provide room for growth and especially for the inclusion of a theological faculty.

In 1892 a compromise was suggested between these two conflicting views in the form of a proposed Theological Board. The Board was to consist of twelve members of the Court and not more than nine or less than three members appointed by such of the theological colleges as should become affiliated to the University, and its functions with regard to theology would represent the combined functions of the Court and Senate with regard to the other faculties. This arrangement would enable the University to admit to degrees in theology graduates of the University or of any other degree-granting body in the United Kingdom whose degrees were recognised by the Court, who had gone through a prescribed course of study in a Welsh theological college and had satisfied the University examiners.

In January 1893 an interesting report on the question of the Welsh University was submitted to the Conference by the General Assembly of Calvinistic Methodists, in which they expressed their opinion that, while it would be strangely inconsistent to establish in Wales a University which ignored theology, yet it would be difficult to arrange for the teaching of theology in the University itself, though it would be quite feasible and desirable to arrange for examinations to be held and degrees in theology to be granted by the University. The degree should be open to candidates of all denominations irrespective of any particular doctrine, provided that they were graduates of some University in the Kingdom or had passed other examinations approved by the University. The introduction of theology in such a form ought not, they thought, to excuse any delay in the establishment of the University.

The Rev. J. D. Walters suggested that they should create a conjoint degree of arts and theology, and Archdeacon Griffiths at once concurred: 'Ah, that's it!'

A student should proceed to take arts and theology and take the first two years in a constituent college, and the third year might be pursued partly in a constituent college and partly in a theological college. In the constituent college he might study philosophy, Greek, and Hebrew, and in the theological college New Testament Greek. The fourth year could be occupied with other subjects of theology. Oxford and Cambridge had a mixed degree; and at Gresham College, which was being formed, they proposed a similar degree.

In the course of the Conference an amendment by Principal Owen was discussed to the effect that 'theology should be expressly named in the charter as an integral faculty of the University of Wales and be placed in every respect in the charter on a basis of complete equality with other faculties of the University.' It was pointed out by several speakers, among whom was Principal Jones, that this would ultimately involve either empowering the national colleges to teach theology—and in that case of what denomination?—or bringing the theological colleges into the University on the same footing as the national colleges. The amendment was rejected, and the proposals of the draft charter of 1892 were incorporated in the Charter which was passed into law in December 1893. The opposers, however, did not fail to make protest through the House of Lords, where the Bishop of Chester moved 'that the assent of Her Majesty be withheld from the draft charter of the proposed University of Wales until such portions of the aforesaid draft charter shall have been omitted as prevent the inclusion of St. David's College, Lampeter, in the County of Cardigan, as a constituent college of the aforesaid University.' Though the motion was carried in the Lords, the Government ignored it.

Among the members of the first Theological Board were Canon Driver, Dr. Fairbairn,<sup>1</sup> Professor Harries, and Dr.

<sup>1</sup> Dr. Fairbairn only consented to serve on this Board at Viriamu Jones' persuasion; afterwards he was very glad to have been a member. He wrote, in 1901, 'The sheer pleasure of working under him and with him made me an ardent member of the Theological Board, and I was looking forward with hopeful pride to submitting to him in a few days a

Moulton. At first only three of the Welsh theological colleges became associated with the University, but more than double that number are now ranked as affiliated theological colleges.

An indication of the confidence felt in the work of the Theological Board was given by a letter from Professor Edwin Odgers, asking whether the divinity students of Manchester College, Oxford, might become candidates for the theological degrees of the University of Wales. But this was not possible, for the University, by its statutes, required all candidates for a theological degree to attend a course of study at one of the University Colleges and at an associated theological college.

The teachers of these colleges are now recognised by the University and form a Theological Senate which has power to make suggestions to the Theological Board; and, whereas, under the London University, only a small percentage of theological students wished for degrees, now the majority take the degree course.

Thus the institution of the University in Wales brought about those reforms in the education of the ministry in Wales as well as of the elementary teachers, at both of which Viriamu Jones had aimed as early as 1883. As Principal Reichel said, he 'had specially at heart the development, in connection with the University of Wales, of a great faculty of theology which, by the maintenance of a high standard of thought and learning might, in the future, attract to the service of the Christian ministry the best intellect no less than the piety of the country.'

On April 6, 1894, the Court of the University met for the first time. Lord Rosebery was in the chair and made a notable speech:

I think that everyone, whether he belongs to Wales or not, cannot but feel that this is a great occasion in the history of the Principality. We who do not belong to Wales have watched for years past the energy and the munificence with which Wales has striven to put her educational machinery on a

completed and revised copy of our report.' Dr. Fairbairn spoke, too, of the patience with which Viriamu Jones strove to understand the points of view of the different denominational leaders and to reconcile them.



level with that of the older parts of the Kingdom. Now there are two points in connection with this University which appeal to me personally with great force. The first is that this University will in the main be a place for poor students. It will not be a place to which men of wealth will come to put a final polish on a leisurely course of education fastidiously gone through ; it will be a place, rather, where the son of the peasant or the farmer or the mechanic may come and grip with hard and even horny hands the weapons to carve out his career. The second point which appeals to me is this. We all talk much in these days of the principle of nationalities, and some, according to their politics, view the principle of nationality either with enthusiasm or with suspicion and distrust. But there is one form of nationality that appeals to us all. I mean that form which consists, not in putting forward political schemes, but in endeavouring to preserve ancient traditions, ancient literature, ancient language, and to press forward in the race with other nations so as to make the nationality to which you belong their equal. Now, it is as a sign of that high and just principle of nationality we welcome this Welsh University. I, with all my heart, and with all earnestness, wish you God-speed.

First of the elections was that of the Chancellor. In March Lord Bute wrote :

MY DEAR PRINCIPAL,—The National Welsh dinner which has just taken place in London to celebrate the institution of the Welsh University, suggests to me that the election of the first Chancellor must be drawing near, and I write to repeat to you the suggestion which I have already made to you by word of mouth, to the effect that Mr. Gladstone would be a very proper person upon whom to confer the compliment.

I need not remind you that I am myself a Tory in politics, and I put aside all political considerations, although it is difficult to forget that these considerations would tend to make the choice a pleasing one to a very large number of Welsh people. I would rather base the proposal upon the fact, not only of Mr. Gladstone's exalted position, but also of his eminent learning in divers directions, a learning which is indeed so vast and varied that the choice would be a homage to learning itself in his person. There are indeed few who could claim to rival him in this qualification.

I think also that the fact of his having been Prime Minister when the Charter was granted, and having therefore presumably advised that grant, would make the choice a very graceful one. It is an advantage that the office would lay no burden upon Mr. Gladstone. He would have to deliver an installation address,

a task which his talents and acquirements would certainly enable him to discharge in a singularly felicitous manner without any trouble to himself. After this, he would have no duties, beyond presiding on certain occasions, and this only when he might feel inclined to do so.

Believe me, dear Principal,

Sincerely yours,

BUTE.

Lord Aberdare heartily seconded this proposal, and wrote on March 8 :

I envy Lord Bute for having made the suggestion of asking Mr. Gladstone to be the first Chancellor of the University—I ought to have anticipated him. But I heartily and entirely agree with him in thinking that no other living man would throw such lustre on the office and the University as Mr. Gladstone. He is by his extraction half a Welshman, he has long identified himself with Welsh interests and aspirations ; in genius, learning, and public services he is simply unapproachable, and no one would more joyfully hail his acceptance of the office than I, who—over and above the common debt of all of us to such a man—have received from him so many proofs of his kindness and confidence.

Therefore let us be unanimous in pressing Lord Bute's admirable suggestion.

Mr. Gladstone, however, wrote declining the office on the grounds of failing health. On all sides it was agreed that the Chancellorship should be offered to Lord Aberdare in recognition of his great services to Welsh education and especially of his part in the foundation of the University. Lord Aberdare's wonderful health, however, was also beginning to fail him. In September he wrote to Viriamu Jones :

I wish I could look forward to attending the University meeting on the 24th. But it may not be. I left London, quite done up—and utterly unable to continue attendance at the meetings of my Commission. I had, in fact, overtaken my brain, and found work simply impossible. My doctor prescribes three months of absolute idleness, especially *in re* letter-writing—in fact to spend my time *somno et inertibus horis* substituting novels for Horace's *veterum libris*. Sir Andrew Clark's warning against overwork and exhaustion, 'Nature is implacable,' rings in my ear.

Please take it for certain that I cannot, should the offer be made, accept the Chancellorship.

I am very glad that you are on the wing for Switzerland. Even your younger and robuster brain must need occasional rest—*neque semper arcum tendit Apollo*.

In spite of this hesitation on his part he was unanimously elected Chancellor in 1895. By his death, only a month later, the University sustained a grievous loss.

He was Commander-in-Chief of the Welsh educational army, said Viriamu Jones, and his election as first Chancellor of the University was but an outward recognition of a leadership long since felt and acknowledged. He lived to see the framework of Welsh education completed, in the building up of which he was so much engaged, and whenever the story of its making is told his name will be freshly remembered.

In May, H.R.H. the Prince of Wales (afterwards King Edward VII) graciously consented to become Chancellor of the University.

The office of Senior Deputy Chancellor was offered to Mr. Rathbone, but he declined it on account of his years and of the complexity of the organisation, and Dr. Isambard Owen was subsequently elected as a fitting acknowledgment of his conspicuous services.

On June 12, the Council of the College at Cardiff decided to arrange the work of the College for the degree courses of the University of Wales, excepting that of the Medical School, for which there was as yet no corresponding faculty in the University. It was a grave decision; but its results, even so far as they could be immediately measured, were entirely satisfactory. The students themselves welcomed the change and expressed increased interest in their work. Professor T. F. Roberts had written in 1894:

Distracted by a multiplicity of text-books, the student has neither the time nor the inclination for that intimate approach to one great book which will enable him to assimilate its power, to recognise in it the fit expression once for all of thoughts and aspirations which have since repeated themselves in a thousand forms, but never with the simple majesty of that primary utterance. To some extent we may infer (though the comparison must be made with obvious qualifications) from the influences upon

thought, upon expression, and upon national character of the one Book—the Bible—which has been assimilated deeply and so devoutly by many generations, what the influence would be, both direct and indirect, of the recognition in a curriculum pursued by increasing numbers of students of the *Republic of Plato*, the chief books of the *Politics of Aristotle*, or the *Aeneid of Virgil*.<sup>1</sup>

This illustrates admirably the restrictions placed upon the student in one department under the old order and the possibilities contained in the new system. The same could be said of all the other departments of study. The student had no longer a given set of data to get up because of some external motive; he could concentrate on his inner self-development.

Shortly before the installation ceremony, the University of Wales sent an address of congratulation to Lord Kelvin, on his Jubilee as Professor of Natural Philosophy in the University of Glasgow, in which they referred to their

debt of filial gratitude, inasmuch as eleven years ago, in an address delivered at the opening of the Physical and Chemical Laboratories of the University College at Bangor, he was the first of all those outside the Principality interested in higher education to advocate the creation of the teaching University for Wales which has now been called into existence.

In June 1896 the opening ceremony of the University took place at Aberystwyth, when the Prince of Wales was formally installed as Chancellor. It was an extraordinarily impressive scene.

The day was perfect. The sun shone gloriously upon sea and land. Tiny white clouds, bringing coolness, sailed and vanished into the blue. The stone-built town of Aberystwyth sparkled with colour; flags and bunting hung from every house. Along the streets leading to the pavilion characteristic Welsh mottoes of welcome and national rejoicing were displayed on banners; strings of gay pennants fluttered in the breeze. All the morning

<sup>1</sup> 'The University of Wales in its relation to the National Life.' A Paper read before the Liverpool Welsh National Society, February 1894, by Professor T. F. Roberts, LL.D., Principal of the University College of Aberystwyth, now Vice-Chancellor of the University of Wales.



visitors were arriving. As the procession of carriages wound up the steep, grey road from the station, there rose before them a blue, shimmering plain of ocean, meeting the blue heaven at the horizon.

There was no building in the town large enough for the University ceremonies and for the concourse of people who would take part in them. A mighty tent was therefore erected over the market-place and adjoining the Town Hall. Within, from the high tent roof, long lines of green and white, the colours of Wales, swept and spread on all sides in drooping curves. The foliage of two of the trees of the market-place, dwarfed by the wide enclosure, added to the sense of coolness and space within.

Two hours before the ceremony, the guests, received and marshalled in perfect order, began to take their places. In no ancient seat of learning could hospitality have combined more courtesy and gracious dignity. Men and women gathered together from all parts of Wales. It was a national festival, and joy overflowed in singing, the national expression of deep feeling, long before the appointed hour. Great was the enthusiasm that greeted the Chancellor and the Princess of Wales, and again it broke out with tumultuous delight as Mr. Gladstone moved slowly to his place, Lord Spencer and Lord Herschell following. Time after time the acclamations rose as friends of their country made their way to the platform.

Against the delicate background gleamed the gold of gorgeous gowns of University officers, the pale tints of the visitors' dresses, and the sombre graduates' gowns with hoods of scarlet, crimson, purple, blue, yellow, and white.

The procession, headed by the Chancellor, entered the pavilion to the sound of the Welsh National Anthem sung by the Treorky choir; and when he took his seat, the opening strains of 'The Druids' Chorus' burst forth, while almost simultaneously Her Majesty's ships *Hermione* and *Bellona*, lying off the pier, fired a salute of twenty-one guns. The Registrar read the deed of appointment which was presented to the new Chancellor by Dr. Isambard Owen, the senior

Deputy Chancellor. All the members of the Court stood during these preliminaries, which included an address in Welsh from the Guild of Graduates. The Chancellor then read his reply in clear, measured tones. After a few words of thanks, he said :

I acceded with pleasure to the wish you unanimously expressed that I would accept this high office, for I have watched with approval and sympathy the efforts of the people of Wales to provide themselves with improved means of education in their own country, of which endeavours this University is an outcome. Nor was I less willing to comply with your request from the fact that my predecessor, the late Lord Aberdare, whose loss we deeply deplore, was so distinguished and so true a friend to Welsh education. Although our University has not long been founded, the spirit which originated its existence, and which I am confident will continue to influence its work, is not of modern date. From very early times, in spite of difficulties and adverse circumstances, the Welsh people have seldom failed to display a marked love for literature and learning. Even in so remote an age as the sixth century, works were produced in which scholars perceive a standard of literary taste very noteworthy in those early days. Throughout the Middle Ages we find the profession of letters held in universal respect in Wales, its exponents protected by privileges and treated everywhere as honoured guests and the objects of popular regard, while Welsh scholars absent from home constituted a conspicuous element in the cosmopolitan crowds who flocked to mediæval Oxford. The present educational movement has made it still more apparent how universally prevalent in Wales is the love of learning. It has been, above all, a popular movement. It has not been merely the effort of the few to diffuse an abstract desire for education which had not previously existed. It has mainly represented the practical endeavour of the many to secure for their children advantages the value of which they could appreciate, although in many cases they had been deprived of the boon themselves.

Five honorary degrees were then conferred. The Vice-Chancellor (Viriamu Jones) first of all advanced to H.R.H. the Princess of Wales and requested her to receive the degree of Doctor of Music. Mr. Gladstone then received the degree of LL.D., the Vice-Chancellor making a short speech in Latin. The degree of LL.D. was also conferred on the Chancellor of the University of London, Lord Herschell,

and Lord Spencer. At three o'clock the Royal party entered the college buildings, where they were received by Lord Rendel (the President of the College) and Lady Rendel. At the luncheon Lord Rendel gave the toast of 'The Queen.' Mr. Gladstone, in proposing the health of the Prince and Princess of Wales, said :

There was never a time when it was more requisite, more urgently necessary that the principle of mental cultivation should be thrust into the foreground and held up on high before the entire community, for we live in a period when, what I may call wealth-making conditions, are multiplied to an enormous extent. The enjoyments of life—I speak among those who have the means of commanding those enjoyments of life—and the conveniences of life have grown around us ever since my boyhood in a degree that can hardly be conceived by those who have not witnessed the change. The meaning of all this is that wealth is acquiring a still greater hold upon us. The hold of wealth upon mankind was always sufficient ; but wealth, which is a good servant, is a bad master, and there is no master who has the power of degrading the human being more than the unchecked dominance of wealth. This University represents the antagonism which is offered to wealth by mental cultivation. The mind of man should be treated as a rich domain, requiring only to be well ploughed, to be well sown, and to be attended to, in order to yield the richest harvest and in order to maintain an effectual protest against the unchecked pursuit of material interests which constitutes one of the greatest social and spiritual dangers of the period in which we live.

The Prince responded, wishing the University and its colleges, 'partners in a great and distinguished work,' every possible prosperity and success.

The Vice-Chancellor in his reply said :

I count it the highest honour that it falls to my lot as Vice-Chancellor to respond on behalf of the University to the toast which you, Sir, have proposed in language so encouraging and which this representative assembly has received with an approbation so moving. It is something over two years since the University Court first met at the Privy Council Office to receive its charge from the Visitor. That was our birthday. Since that time statutes, degrees, regulations, and schemes of study have been framed, and our first degree examinations are now being held. I trust all this has been done in a way to illustrate the

capacity for business, the grasp of the principles of public life, and the way in which public questions should be dealt with, which is characteristic of the people of Wales, if we may accept, as I hope we may, a recent utterance of the senior Deputy Chancellor (Dr. Isambard Owen), whose name I cannot mention on this occasion without at the same time expressing the respect and admiration I feel for the part he has taken in the initiation and development of the University. We are again met to-day, this time in full Congregation of the University, and keeping, as it were, a new birthday in celebration of your Royal Highness's advent to the office of Chancellor. Believe us, Sir, we count it a great thing that you have become our leader. It emphasises in marked degree the claim we have made on behalf of our University, that the University of Wales is Wales itself organised for university purposes—Wales itself organised for the guidance of higher education, the advancement of learning, the promotion of research. This union of Prince and people, this great representative gathering, bear to the University authorities a message that will help them in the work they have to do ; for they speak of a national determination to spare no pains to make that University worthy to take rank side by side with the great universities of the world ; and, so speaking, they will tend to strengthen in us the independence and self-reliance without which no great life is possible. There are two salient features in our University constitution. The first is the representative character of the Governing Body. Upon this I will not now enlarge. The second is the position of absolute equality assigned to women in our Charter. The last paragraph of the first article in the Charter runs as follows : ' Women shall be eligible equally with men for admittance to any degree which the University is by this Our Charter authorised to confer. Every office hereby created in the University and the membership of every authority hereby constituted shall be open to women equally with men.' And this clause has received eventful exemplification to-day by the gracious entry of Her Royal Highness, the Princess of Wales, into the Guild of Graduates as Doctor in the Faculty of Music.

To the visitors at our meeting in Congregation I give thanks in the name of the University for their presence, and very specially do we desire to thank the other universities for the sympathy they have shown us on this occasion of rejoicing by the presence of their distinguished representatives. And in conclusion I have only to say that our University authorities will set themselves to work greatly cheered and encouraged by the events of to-day's Congregation and by this toast and its reception, with all that its proposal and honouring imply.



Mrs. Mary Davies then sang the national song 'Land of my Fathers' both in Welsh and in English, also the English National Anthem, the vast assembly joining in the chorus.

Thus ended the ceremony, to the end maintaining its unique distinction.

## CHAPTER IX

### SCIENTIFIC RESEARCH

His power of applying his mathematical knowledge to theoretical investigation, and his remarkable skill in experimental work are such as to make me rank him among the ablest pupils I have ever had and to raise in my mind the expectation that if he should devote himself to this branch of science he would at no distant date attain to a high position among the Physicists of this country.—*Professor Clifton*, in February 1880.

Yet another gap in the front rank of science. But yesterday it was Fitzgerald, then Rowland, and now—Viriamu Jones is dead, the last like the first, especially great in inspiring others.—*Professor Ayrton*, *Nature*, June 13, 1901.

AT Sheffield, in the early part of 1882, Viriamu Jones began to make some experiments in Light, but the administrative routine on which he was always engaged made it almost impossible for him, both there and during the first years at Cardiff, to undertake research work, though it was to research in science that his own inclination led him. He gave four popular lectures on Electric Light in Sheffield, and one at Dundee in 1882. He hoped to lecture also in the outlying districts of Sheffield, in that which belies its name—Brightside, and in Attercliffe, but left Sheffield before this was possible.

In 1886, three years after his appointment at Cardiff, he gave a short series of popular lectures on Electric Light in the Queen's Hall, Cardiff, when he derived special satisfaction from the fact that artisans formed a large part of the audience. In the month of October he lectured on 'Polarised Light' to the Society of Naturalists, and in December to the Cardiff Cymmrodorion Society on the

'Laws of Falling Bodies'; in the same month he read a paper at a meeting of the London Physical Society.

In January 1887, when President of the Naturalists' Society, he gave another and more general address. Prefacing his remarks with the characteristic statement that he must interpret the honour they had bestowed on him as paid not so much to himself as to the College, he went on to review the past work of the Society, and spoke of the idea of combined investigation, of an organised assault on the fortress of natural knowledge that was taking hold of the country.

It is not a new idea. It fascinated the intrepid mind of Bacon. 'All works,' he has told us, 'are conquered (1) by greatness of reward, (2) justness of direction, and (3) united labours.' If Bacon exaggerated the possible results of it, nevertheless common work and combined investigation are the *sine qua non* of modern scientific progress. Generalisation, it is true, is the work of the master mind. But it is within the power of us all to help to bring together a body of facts so arranged as to be available, classified for reference artificially, while we wait for him who shall classify them for all time naturally. Never before was that so possible as now. The large number of learned societies publishing transactions makes it possible for everyone to preserve for the use of others any valuable piece of knowledge he may acquire. Indeed, so numerous are scientific periodicals and books of transactions of learned societies that there is a danger of the valuable information being preserved only too well—hermetically sealed up in the impenetrable walls of an indefinite and unattackable amount of printed matter. There it is that such action as that of the Royal Society becomes especially valuable. The cataloguing of the ever-increasing accumulation of scientific papers is becoming of the greatest importance, and will one day arrive at the dignity of being called a science itself.

The Royal Society, he added, had attacked the problem and had published a catalogue of scientific papers dating from the beginning of the century.<sup>1</sup> The British Association was anxious to promote a scheme of combined investiga-

<sup>1</sup> As a result of conferences held in 1896, 1898, and 1900, on the initiative of the Royal Society, arrangements have been made for the compilation of an International Catalogue of Scientific Literature from the beginning of this century. The first part of this catalogue appeared in 1904.

tion for the Naturalists Societies of the United Kingdom, and in endeavouring to do so he thought it was undertaking a very laudable piece of work, and one which he hoped would receive every assistance from them in Cardiff.

It was during the time that Viriamu Jones was President that Mr. C. Vernon Boys, then Assistant Professor at the Royal College of Science and Royal School of Mines, came to lecture on 'Threads: their Philosophical Uses' for the Cardiff Naturalists Society in one of the College rooms, and asked for the loan of 'electric light and lantern and the assistance of Mr. Harrison whom I found invaluable.' On this occasion Mr. Boys showed his extraordinarily delicate quartz fibres, invaluable in the laboratory, finer than gossamer, perfectly elastic, and stronger than silk; and for the first time in public some of his exceedingly beautiful soap-bubble experiments, one or two small ones inside a larger one.

In 1887, 1888, and 1889, Viriamu Jones was appointed Examiner in the Preliminary and Final Examinations in the Physical Section of the Natural Science School. In May 1888 he wrote from Oxford: 'I have been intolerably busy'; and Professor A. L. Selby,<sup>1</sup> who was associated with Principal Jones in the year 1887-8 as Examiner in the Honours School of Natural Science at Oxford, has related their joint attempt to improve the preliminary examination in Mechanics and Physics which was held twice a year for candidates for Honours in the Final School of Natural Science. At that time the students of advanced Physics were few, and arrangements for tuition presented difficulties. Moreover, the preliminary examination in Physics included no practical work. The new examiners sought to frame their papers on rather different lines from their predecessors. By making their questions more definite and by adding numerical examples on fundamental principles, they hoped to obtain a real test of the students' appreciation and understanding of the principles of the subject. Though the number of candidates ploughed was not abnormal,

<sup>1</sup> Professor of Physics at the University College of South Wales and Monmouthshire, Cardiff, from 1891.



the innovations were greatly disliked by many tutors, and the Board of the Faculty of Natural Science appointed a Committee to consider the papers.

The 'slaughter of candidates in preliminary Physics' caused considerable dismay; but at the second meeting of the Committee, evidence on the subject of the papers was invited, and these papers were eventually declared to be admirable. It was generally felt that the examination should include experimental work, and the proposal to institute a practical course in preliminary Physics had no stronger supporter than Viriamu Jones. His opinion carried great weight with the authorities, and in 1890 the Board of Natural Science approved a schedule of practical work in preliminary Physics, and a corresponding practical course was instituted at the Clarendon Laboratory.

Mr. James Walker, also Examiner in the Natural Science School, remembers that Viriamu Jones expressed the opinion that 'the failure of a fair proportion of candidates is the sign of the healthy condition of a pass-examination,' and he adds :

He had a very high view of the duty of an examiner to strive by the papers he sets to maintain a high standard of teaching in the University and even to guide teachers as to what to teach and how to teach it; and for this purpose he considered it legitimate to insert a *few* questions that perhaps the candidate would be unable to answer with the view of ensuring that they should be taught the subjects with which the questions dealt.

In 1889, the third year in which Viriamu Jones examined at Oxford, Mr. (now Professor) A. L. Selby and Mr. E. H. Hayes were his colleagues.

In May 1889, Viriamu Jones was asked to lecture at the Mechanics Institute at Pembroke Dock; the writer of the invitation, a minister on the governing body of the College, mentioned that he would be received with music, and suggested a series of calls and visits in other towns in Pembrokeshire *en route* for the Institute, a missionary progress which had to be declined. A brass band heralded his arrival and a selection of music was given before and after the lecture itself. The local paper's report ran :

If the definition of genius be true—namely, an eye to see nature, and a heart to feel nature, and courage to follow nature, Principal Jones has that highest of gifts and he has it under good cultivation.

In seconding the invitation given in 1889 by the Mayor and Corporation of Cardiff to the British Association for 1891, Viriamu Jones said :

A part of the mission of the British Association was to awaken, stimulate, and vivify interest in science. He did not know whether Cardiff had competitors in the race this time, but in case Edinburgh pressed its claim, he would ask them to remember—though he admitted the power of Edinburgh's beckoning finger—that Cardiff needed a visit of the Association most.

He had already begun to work at the measurement of electrical standards, a subject of great practical importance to electrical engineers.

The British Association in 1861 inaugurated a movement for establishing a system of electrical units. The original committee appointed to undertake the necessary investigations selected the ohm, the unit of electrical resistance, as the first unit to determine, and eventually established the system that is now in use all over the world.

The work of the Committee was carried out at King's College, London, under Professor Clark Maxwell, F.R.S., in 1863 and 1864, and under Professor Fleeming Jenkin, F.R.S., of Edinburgh University.

Electric resistance is a physical property of any body such as a piece of wire or a column of mercury and the ohm is the name given to the unit in terms of which the resistance of any wire is measured. This unit is defined from theoretical considerations, which enable a resistance to be measured in terms of the fundamental units of length and time. Such measurements are usually called 'absolute' measurements. The Committee constructed a number of coils of wire of platinum-silver and other materials and determined by their measurements the resistance in ohms of each of these coils, which thus became the practical standards of resistance in terms of which the resistance of any other body is measured. The method they employed

was devised by Sir William Thomson. It has since been shown that these early measurements were in error by rather more than one per cent., but in view of the difficulty of the problem the accuracy attained was very remarkable.<sup>1</sup>

From 1865 onwards many determinations were made, of which Lord Rayleigh's in 1882 was the most important.

The original Standards Committee lapsed in 1870 after some years' work, but those of the body who survived were reappointed in 1880 with additional members, including, some years later, Viriamu Jones, as a committee to make experiments for improving the construction of practical standards for use in electrical measurements. The Committee included Professor Carey Foster (Chairman), Lord Kelvin (then Sir William Thomson), Lord Rayleigh, and Professor Adams; Dr. Glazebrook became the Secretary of the Committee, and the standards were put in his charge at the Cavendish Laboratory. In 1888 Viriamu Jones applied for and received a grant of £50 from the Government Research Fund of the Royal Society for use in a measurement of the ohm by a modification of the Lorenz method.

By this time it was clear that there was some appreciable uncertainty attaching to the original measurements of the British Association Committee; and though the measurements of the various distinguished men who had attacked the problem were by no means in accord, Viriamu Jones set himself to clear up the difficulty. He had just published, in this year (1888), a paper on the subject of electrical standards.

It consisted of a determination of the coefficient of mutual induction of a circle and coaxial helix in connection with constructing the coil of a Lorenz apparatus by winding a *single* layer of wire in a screw thread cut on the surface of a large brass cylinder. For it seemed probable that with such a coil Lord Rayleigh's formula, which is a first approximation, would not give a result of sufficient accuracy, and the Principal succeeded by a method of direct integration in obtaining a comparatively simple formula which gave the coefficient of mutual

<sup>1</sup> Dr. R. T. Glazebrook.

induction with greater accuracy, and enabled a larger coil of a single layer, the geometry of which can be better known than one of many convolutions, to be employed.<sup>1</sup>

He had thus already covered one stage of the larger investigation which was to occupy all his spare moments for the next two years.

Mr. Samuel Harrison, formerly assistant in the Physical Laboratory at the College at Cardiff, wrote of the conditions in which Viriamu Jones carried out his scientific investigations :

At last, about the end of 1887, a room was fitted up in temporary buildings, with a substantial concrete floor asphalted on top and slate tables on brick piers, so that work requiring steadiness was possible. It is still a mystery to me how Principal Jones found time to carry through his original research on the determination of the ohm. I know that he made laborious calculations himself, as I have frequently called out the logarithms for him till one and two a.m., and this after a hard day's work at the College. His expressed desire was to carry out this work in a good engineering manner; and, after the drawings were made by the Principal's brother (Mr. Morlais Jones), most fortunately an unexpected legacy, earmarked for the Physical Department, made it possible to purchase a Whitworth lathe and to proceed with the work.

I can still assure you it was hard work too. Principal Jones's tenacity of purpose and his cheery good temper always smoothed over any difficulty. He very often had to leave what was to him intensely interesting work to attend a House Committee, to decide *inter alia* how many additional scrubbing-brushes should be ordered for the College, to return looking as though he had thoroughly enjoyed that diversion.

Once we had been troubled with a wandering zero on a galvanometer, and Professor C. Vernon Boys had kindly undertaken to lay our nigger low. We had managed to rig up our galvanometer successfully with one of his wonderful quartz fibres. Before a single reading was taken the Principal accidentally kicked over a roll of felt—the suspension was broken. On that occasion our Principal's temper was ruffled, and he showed he was a very human man after all.

In 1889 Viriamu Jones discussed the employment of Lissajou's figures for determining the rate of rotation of the disk of the Lorenz apparatus and of a Morse receiver for measuring the periodic time of the tuning-fork employed.

<sup>1</sup> Professor Ayrton in *Nature*, June 1901.



By the middle of the year 1890 the first series of experiments in connection with the determination of the ohm were completed, and Viriamu Jones, writing to Lord Rayleigh to acquaint him with the fact, also announced the result of his experiments with his specially constructed Lorenz apparatus at the meeting of the British Association at Leeds. In November 1890 he communicated the details of his investigation to the Royal Society through Professor Clifton, in a paper 'On the Determination of the Specific Resistance of Mercury in Absolute Measure.'

The object of all these experiments was to determine in absolute units, i.e. 'ohms,' the resistance of some physical standard such as a coil of wire. At an early date Dr. Werner Siemens had introduced as an arbitrary standard the resistance of a column of mercury one metre in length and one square millimetre in section at a temperature of zero centigrade. This unit was known as the Siemens unit and its resistance was not very far from one ohm. It was clear that by increasing somewhat the length of this mercury column a material resistance standard could be constructed having the value of one ohm, and it had been agreed at an International Conference in Paris in 1882 that such a standard should be constructed and the length of the mercury column, 1 mm. in cross section having a resistance of one ohm, should be determined. A further conference, sitting in 1884, had decided on the basis of the experiments then available that the length of the column was 106 centimetres. With this estimate, however, Sir William Thomson did not agree; in his view the more accurate length was 106.25 or 106.3 centimetres.

The resistance of the column 106 cm. in length became known as the 'Legal Ohm,' though it never was legalised in England. (The title of Viriamu Jones's paper given above is equivalent to saying that it was a determination of the true length of this column.)

The method used by Principal Jones was by no means new. Invented originally by Lorenz, it had been used with good effect on several occasions, notably by Lorenz himself, Rowland, and Lord Rayleigh. But, though the method

was simple in theory, certain difficulties of detail appear never to have been satisfactorily surmounted except by Viriamu Jones. These related in the first place to the elimination by differential processes of two important errors involved in direct measurements of a mercury column—the disturbance, namely, in the lines of electrical flow produced by the constrictions at the end connections, and the modifications of the free surface due to capillary attraction. Another difficulty appeared in the evaluation of a certain integral. This integral he discovered, to his surprise and satisfaction, yielded to an almost direct attack. The other improvements he introduced are largely of a mechanical nature, abundant use having been found during the inception and progress of the work for the Whitworth measuring machine and the Whitworth lathe with which the laboratories at the South Wales University College were already furnished. His contribution towards the settlement of a momentous question depended for its value to a considerable extent on the recognition of the vital importance of first-class mechanical design and manipulation which in the past had been much neglected.

The unvarying goodwill of the local Press towards the College here found a subject :

It is within the knowledge of many people in Cardiff interested in the coming struggle for educational and scientific supremacy that the authorities of the College aspire to possess one of the most complete sets of mechanical laboratories and workshops at present or presently to be in existence. Under these new conditions, work of the kind undertaken by Principal Jones will in the future be easier to accomplish and will probably take a wider range. In short, Cardiff has scored with Principal Jones : and if the people of Cardiff are wise, they will see to it that those who are fighting the educational and scientific battle of the metropolis of South Wales are well armed and of good courage.

The Principal's paper was included in the Transactions of the Royal Society, and in 1891 the complete account of his special Lorenz apparatus, its use, the mathematical calculations employed and the results obtained, was published in the Society's 'Philosophical Transactions.'

Lord Rayleigh has very kindly written his opinion of the paper :

September 1st, 1914.

DEAR MRS. JONES,—I have been refreshing my memory of Jones's Philosophical Transactions Paper of 1890.

Two features in the work stand out specially.

As the title indicates, it is a direct determination of the specific resistance of Mercury in Absolute Measure, the resistance employed being an actual column of Mercury. This was in fact a reversion to the practice of Lorenz, but Jones introduced important improvements.

The Mercury was contained in a rectangular trough and the depth was varied so as to eliminate in great degree the irregular surface due to capillarity.

In the actual experiments the trough was lined with paraffin wax, but in suggestions for further improvements Jones proposed that it be made of plate-glass or marble.

I am not aware of any further work on these lines.

Perhaps uncertainties in the free surface were feared not wholly to be eliminated by varying the depth.

The other feature to which I attach great importance, was the use of coils of wire containing only a single layer. The situation of the wire is then better known than is possible when there are several layers, and the measurements can at any time be verified.

The remarkable results obtained in recent years by Mr. Smith at the National Physical Laboratory would, I think, have been impossible on any other system.

In the construction of the Apparatus and in the execution of the experiments, Jones insisted upon the advantage accruing from the use of best mechanical appliances. Doubtless this prescription is good when a stage is reached when the preliminary difficulties have been overcome, though even then it may be well to remember that the most elaborate arrangements are not necessarily the best; sometimes, too, it will depend upon individual taste and experience.

I am,

Yours very truly,

RAYLEIGH.

An engineer and head of a small electrical engineering firm wrote to the Principal :

The subject you have taken up is one of great importance to practical men, and I can well appreciate the care that is required to get accurate results. I was particularly struck with your

method of getting over the difficulty of the varying resistance at the brushes of your disc.

A few days after the communication of his paper to the Royal Society, Professor Ayrton invited Viriamu Jones to meet Professor Hertz<sup>1</sup> and others interested in electromagnetic radiation at the Langham Hotel. This meeting with Professor Ayrton was the beginning of a friendship which only ended with Viriamu Jones' death.

Writing in November 1890, Professor Clifton said :

I am very glad to hear that your paper has been passed for the *Philosophical Transactions*. I should have been greatly astonished at any other result. Your remarks about me in relation to your work are exceedingly kind, but I can't award myself any credit. No influence was required to give you scientific impulse.

Again in January 1891, Professor Clifton wrote :

For some time I have been intending to write to you about your candidature for the Royal Society, but something has constantly arisen to prevent me from carrying out my intention. If you agree and will allow me to propose you, I will take your certificate in hand at once, as there is not much time to spare.

An interesting question from Lord Rayleigh came in July 1891 :

A Committee acting for the Board of Trade is trying to get out specifications for the Clark cell and for measurement of currents by electrolysis of silver. Have you any experience in these matters ?

In August of 1895 he wrote : ' I have had a busy day in the laboratory—a good day's work. Committees and visits from future technical teachers.' And again : ' Disc

<sup>1</sup> Heinrich Rudolph Hertz, when Professor at the Karlsruhe Technical School, made his remarkable experiments on electric waves, the existence of which was implied by Maxwell's theory of electricity and magnetism. The great advance made by Hertz was the experimental demonstration of the existence of electric magnetic waves of comparatively low frequency. He proved the existence of such waves, showing that they could be reflected, refracted, polarised, and diffracted : measured the velocity of their propagation and found it to be of the same order as that of light and radiant heat. Wireless telegraphy is the practical development of the experimental facts established by Hertz. He died in 1894 at the age of thirty-seven, having made discoveries that place him beside Faraday.



all day. Results coming out satisfactorily. I am beginning to long to get a week's rest.' And on August 15: 'I am going to the Chalet on the 23rd. Between this and then I must write my paper. Harrison has not yet posted me the figures, without which I cannot make much progress.'

His paper on 'Standards of Low Resistance' was read before a meeting of the British Association held at Nottingham in September 1893. He advocated the use of Lorenz' method to construct such standards. In this method the electromotive force set up between the centre and the edge of a disc rotating in a coil traversed by a current is balanced against the difference of potential between the ends of a resistance conveying the same current. The resistance is determined when the rate of rotation of the disc and the mutual induction between it and the coil are known. He did not aim at an exact balance, but took the galvanometer deflections at two speeds on either side of that required for a balance. On interpolation he obtained the latter. The method of keeping the speed constant was described, also the nature of the contact with the edge of the disc. It was found necessary to make this contact by a perforated metal tube through which mercury continually oozed. Principal Jones thought that these low resistance standards were of great practical use, and gave a comparison between his measurements and those of Mr. Crompton on a standard intended to be  $\frac{1}{2000}$  ohm, and showed that its value can be determined to  $\frac{1}{12000}$  part.<sup>1</sup>

In 1894 Viriamu Jones determined the absolute value of the resistance of a combination of four coils which had been compared with the original standards of resistance constructed by the first British Association Committee which were then in the Cavendish Laboratory.<sup>2</sup>

Requests for lectures, for advice on scientific points, and correspondence of all sorts steadily increased. The Cardiff Photographic Society asked for a lecture on the 'Velocity of Light'; the editor of a new scientific journal wished to add the Principal's name to his list of contributors; the

<sup>1</sup> Appendix III. of 1893 Report of the British Association.

<sup>2</sup> Appendix II. of 1894 Report of the British Association.

Research Committee of the Cardiff Naturalists Society asked that, in the case of the construction of practical standards for use in electrical measurements, their Secretary might apply to the College instead of to the Secretary of the British Association Committee.

An inquiry, dated September 1894, was made by the Electrical Standardising, Testing and Training Institute, Faraday House, Charing Cross, who wished for information as to an instrument for measuring resistances and asked whether the College would undertake accurate measurements of resistance for them.

In May 1895, Viriamu Jones lectured on the absolute unit of electrical resistance at the Royal Institution;<sup>1</sup> and in 1896 gave an account of the correction that would have to be made in consequence of a very slight ellipticity of his large brass coil which he had found to exist in 1894, and he showed that his 1890 value of 106.307 centimetres for the ohm would have to be increased to 106.319 on this account.

In 1896 he was asked to superintend the construction of a Lorenz apparatus, similar to that in the University College at Cardiff, for the Physical Laboratory of the McGill University at Montreal. The machine was built, to his designs, by Messrs. Nalder Brothers, electrical engineers of Red Lion Street, Clerkenwell. The work of erecting the apparatus was carried out at Professor Ayrton's laboratory in the Central Technical College, London, and with all the help he could put at his friend's disposal; many letters on the subject passed between them. A full description of its use in determining the absolute value of the resistance of a combination of four coils, as explained by Viriamu Jones himself, was published in the 1897 Report of the British Association Committee on Electrical Standards.

Viriamu Jones and Professor Ayrton went out together

<sup>1</sup> The *Pall Mall Gazette*, writing of this lecture, said that 'it was remarkable for the beauty and delicacy of the apparatus which Professor Jones had evolved to illustrate his researches, one of the prettiest features being his method of ensuring absolute constancy of speed in the rotation of a disc driven by a motor.'

to Toronto to the 1897 meeting of the British Association. From Toronto he wrote on August 27, 1897 :

The B.A. meetings are over. They have been a terrible rush. So many social functions mingled with the Science that one hardly found a moment to oneself. The week has been delightful. The papers all went well, and I think my piece of Mathematics and also the joint paper (Ayrton and I) on the Ohm were appreciated, especially by some American men of Science. The Electric Standards Committee have asked us to determine the ampère and volt, offering us £75 for the purpose. We are about to consider how to do it.

The formula developed by the Principal in 1888 for the calculation of the mutual induction of a circle and a coaxial helix, although comparatively simple in view of the accuracy obtained with its use, led, in reality, to a long, laborious calculation when employed in practice. Consequently he spent some of the leisure of his voyage home from Montreal in working out a simplification of the method previously described, and a more general solution; and the account of this formed the substance of the paper he read before the Royal Society in November 1897.

He was elected to the Council of the Physical Society in 1898, and in this year he and Professor Ayrton designed an ampère balance of a form which would readily lend itself to the use of a new formula (also developed in the preceding Royal Society paper) for the force between a uniform cylindrical current sheet and a coaxial helix, which could readily be expressed in elliptic integrals. The practical tests were made in London, and, when both could not be present at them, Professor Ayrton reported progress.

Lord Rayleigh, who was much interested in the subject of the mutual induction of coaxial helices, wrote in July 1899 :

DEAR PROFESSOR JONES,—I have been thinking about the question of the helix and have thought it best to put my notions into print. I enclose a rough copy. It is clear, I think, that there is nothing to be feared.

Although your plan has great merits, I cannot help thinking that, while the Committee are about it, it would be satisfactory to use *also* an apparatus designed more like mine—with improvements, of course—and to carry yet further the principle of getting the result independent of linear measures.

It would be desirable that the execution of both sets of experiments should be in the same hands, as a great deal of work would thus be saved in comparisons with silver, Clark cells, etc. But I don't know whether you and Professor Ayrton would care to take it up. I could soon fix the dimensions and proportions that I would recommend, but of course there would be a great deal more to do beyond that.

Yours very truly,  
RAYLEIGH.

By this time the design for the ampère balance, which had been entrusted to Professor Ayrton and Viriamu at the Toronto meeting of the British Association, had taken form. Help in its construction had been generously promised by Sir Andrew Noble, and on November 6, 1899, Professor Ayrton wrote :

We made some very accurate tests of the permeability of the specimen of phosphor bronze sent us by Messrs. Armstrong, Whitworth & Co., and I am hoping shortly to receive the casting of the lifting arrangement in the rough, for the purpose of testing its permeability. But I am sorry that the rest of the apparatus has not made much way, in consequence of nearly the whole of my assistants having left me for better-paid posts and my having to spend much time instructing new ones, some of whom have not yet come. . . . I hope that you are picking up wonderfully, and that at Christmas my Vice-Chancellor—as youthful and brisk as of old—will have an opportunity of greeting a white-haired sort of Rip Van Winkle trudging south from the shores of Great Britain.

And again on August 10 of the following year :

Your handwriting is very welcome, and equally so the news that you are quite well again. The Ampère Balance will at any rate have one well man to look after it ; for, as I have been growing worse, you have been growing better. But the average has, I think, gone up, since even when you were fairly well a year and a half ago I was only very so-so. Beside, you can sleep, whereas I only toss about all night like a ship without a rudder. . . The stand for the Ampère Balance made at the Armstrong, Whitworth Works is delivered.

This design for an ampère balance was briefly described in Appendix III of the 1898 British Association Report. It was not finished at the time of the Principal's death,



but Professor Ayrton undertook to carry out the work alone. 'The liberality of the British Association and of Sir Andrew Noble,' he wrote in *Nature* on June 13, 1901, 'will enable his standard ampère balance to be realised. The love of his friend will accomplish its completion.'

The balance (the Ayrton-Jones Current Weigher) was ultimately erected, with some important modifications due to Mr. F. E. Smith, at the National Physical Laboratory. It is described in the paper by Ayrton, Mather, and Smith published in the 'Transactions' of the Royal Society for 1908.

The method of measurement depends on the mutual attraction or repulsion between coils of wire through which the electric current passes. Thus, if an electric current flows through two similar coils of wire, one of which is placed above the other, there is a mutual attraction or repulsion between the coils. If the upper coil is suspended from one end of the beam of a balance, the force of attraction or repulsion may be measured by adding weights to, or taking weights from, one of the pans of the balance. The weight being known, the value of the current can be calculated from the dimensions and distance apart of the coils. In the current weigher at the National Physical Laboratory there are two suspended coils, one being hung from each end of the beam of the balance. Each of these coils is suspended within and midway between two fixed coils, the current through the latter circulating so as to produce a magnetic field roughly similar to that of a consequent pole bar magnet. The magnetic field produced by the current in a suspended coil is analogous to that of an ordinary bar magnet, and as a result the coil is subjected to an upward or downward force which is measured by the addition or subtraction of weights. The coils consist of single layers of wire wound in screw-thread grooves in marble, and the force between them when a current circulates through them was calculated by a formula developed by Professor Jones. The instrument was designed by Professor Ayrton and Professor Mather in collaboration with Professor Jones and the Director of the National Physical Laboratory, and the arrangements

chosen enabled full advantage to be taken of the mechanical precision attainable with modern machine tools, a subject in which Professor Jones took the keenest interest. In fact he persistently advocated that such instruments should be engineering tools rather than ordinary physical laboratory apparatus.

It was Viriamu Jones' ambition to provide the National Physical Laboratory with electrical standards constructed like well-designed engineering machine tools, rather than the ordinary physical laboratory apparatus, and his scientific work of recent years all tended towards such an end. He criticised the modern electrical measuring instruments for not being constructed on engineering lines. Even his own Lorenz apparatus for the McGill University did not satisfy him, and he was anxious to have an opportunity of constructing one which would be still more perfect. Such a machine must be costly, and in 1893 he wrote to the Clerk of the Drapers Company :

MY DEAR SIR,—In pursuance of our conversation of July last in regard to the measurement of electrical resistance in absolute measure, I shall be grateful if you will bring the matter before the Drapers Company.

It is of great importance that the standard of electrical resistance should be a constant standard. At present the standard is the electrical resistance of a certain coil of wire kept in the Board of Trade Standardising Laboratory, and if, as is likely from time to time to occur, that standard varies, we have no means in the Government Laboratory of determining the variation. It is possible, by means of the method described by me in a succession of papers to the Royal Society and the British Association, to use the skill of the mechanical engineer, which has attained such perfection in this country, to make a machine which shall measure electrical resistance absolutely in terms of the centimetre and the second to an accuracy of one part in 10,000 and something better.

Two such machines have been constructed in this country during the past eight years. The first was made in the College Workshop here, and it has been constantly used in my laboratory. It is described in a paper in the 'Philosophical Transactions' of the Royal Society (1891 A, pp. 1-42). It was a first attempt, and, though effective in working, was built up bit by bit, alterations being made with growing experience. The

second machine was made eighteen months ago, under my supervision, by Messrs. Nalder Brothers, for the Physical Laboratory of the McGill University, Montreal. It is in many respects an improvement on the machine in my laboratory, but here again increased experience has suggested to my mind many improvements in design.

The time is ripe, I think, for the construction of a new machine made with all available mechanical engineering skill in an improved design, and I think such a machine would settle once for all the long doubtful question of the absolute value of electrical resistance to an accuracy of one part in 10,000.

But such a machine would cost from £600 to £700 with all its accessories, and the expenditure of such a sum is beyond the power of most private individuals—certainly beyond my own—and it has occurred to me that the Drapers Company might be prepared to undertake a research of such public importance. My own time and experience I would gladly give in such case to the work.

I need hardly say how glad I shall be to place before the Company such further information as may be desired, should the Court be willing to give consideration to the matter.

Believe me,

Yours very truly,

J. VIRIAMU JONES,

Principal.

A sum of £700 for the construction of this improved Lorenz apparatus was promised by the Drapers Company; and Professor Ayrton has recorded many talks he had with Viriamu Jones about its details—how the coil and rotating disc were to be horizontal, and the non-magnetic driver a turbine, etc. The duties of his post had for several years so often demanded his presence in London that he had to consider whether the apparatus would be as conveniently available in Cardiff as in London, but, before he had decided where it should be erected, illness stopped Viriamu Jones' work.

After his death the Drapers Company transferred their gift to the National Physical Laboratory, and with generous assistance from Sir Andrew Noble an apparatus based on that of Lorenz has been erected there.

The form of apparatus eventually decided on is very different from that previously employed, but the principle

is the same. In the National Physical Laboratory instrument there are two rotating discs of metal and two coils associated with each disc. The object of this is to obviate the necessity of knowing with great accuracy the dimensions of the discs and to minimise disturbances due to the earth's magnetic field and thermo-electric forces at the brush contacts with the discs. As in the case of the current weigher, the coils are wound in screw-cut grooves in marble. Very exact means of controlling and measuring the speed have been adopted and every care taken to make the measurements with high precision. The accuracy with which a resistance measurement can be made is believed to be within two parts in 100,000.

An account of measurements made with the apparatus appears in the 'Philosophical Transactions' of the Royal Society, Series A, vol. 214, 1914.

On the bed of the machine a plate is inscribed as follows :

Presented to the National Physical Laboratory by the Worshipful Company of Drapers of the City of London as a memorial to Professor J. Viriamu Jones, F.R.S. The machine was designed in the Laboratory and constructed at Elswick by the kindness of Sir Andrew Noble, Bart., K.C.B., F.R.S.

At Cardiff a Physical Research Laboratory was built as a memorial to him, and in it research work of a very high character has been carried out.



*In Memoriam J. V. J.*

Great Welshman ! clear beyond th' engulfing tomb  
Thy memory shines with unabating ray ;  
Striking the splendour of thy brief, bright day  
Athwart our heavy hours of mortal gloom  
Large labours thou hast chosen, swift sad doom  
Of early death, rather than lengthened stay  
Less fruitful here, than ease, to plant thy way  
With deathless seed bestowed in Time's dark womb.  
And thine the lovely graces, cheerfulness  
And largest sympathy that deemed each heart  
Should win to harvest though 'twere yet unsown  
So fanned by faith, untouched by fearfulness  
Thy fire of service burnt till Death's high part  
Set it more near to the abiding Throne !

ALICE WILLS.

## CHAPTER X

### PERSONAL CHARACTERISTICS

I always think of him as of the messenger with the fiery cross. He might not pause ; he must thread the brake and leap the brook ; and press against the steepy hill, for danger, death and warrior deed were in his course as surely as with the fleet-footed Malise of old.

Like Malise, too, he would burst down now and again from the heights with a burning message to stir the sleepy and indifferent.

I appreciated as I could not have done, unless I had known him very well, the beauty of his character and the charm of his very remarkable personality. His life was not to be measured by days, but by what he had done in its course. So measured, it has been a long one as well as a great one, and one full of grace and beauty.

His judgment was the tribunal to which we brought every thought and idea, every book and every play. I cannot imagine what it would have been to grow up without him.

THE first of these appreciations was written by the Hon. Mrs. Champion Russell, when, as neighbour and friend, sharing both work and play, she saw him in his daily life in Cardiff ; the second, by Sir Alfred Wills ; the third by his ward.

For the two latter friends, Viriamu Jones' life-work had but little interest, and its claims were often a matter for protest ; theirs was a personal friendship, which sought him as guest, companion, fellow-traveller, and adviser. Sir Alfred Wills, thirty years his senior, at their first meeting was impressed by his charming courtesy and delighted in his intellectual distinction ; his ward, the daughter of his oldest and dearest friend, whom he had known from her earliest childhood, found in him not the kind guardian only, but the truest and tenderest of friends in after life.

Every powerful personality reveals itself in different aspects to those about him with whom he is intimate ; swift sketch and faithful portrait may alike recall some familiar expression ; yet no variety, no multiplication of individual impressions, can fully render the radiance, the grace, the strength and individuality of the living man.

Viriamu Jones was slight and graceful : his hair light brown, and his complexion clear and coloured by open air and sunshine. His deep blue eyes, remarkable for their beauty, were even more remarkable for their expression of concentrated purpose, of eager hope and confidence ; even in repose his alert expression suggested a runner, with loins girt for the race.

One secret of his persuasive ascendancy lay in the smile of rare sweetness and charm to which the firm, well-cut mouth could soften. Years never seemed to tell on him. Even after months of painful illness, when, in his convalescence he began again to walk and bicycle, his movements were as quick and agile as a boy's, and it seemed impossible to believe he had reached the age of forty-four. Nevertheless, till 1891, no one could better give himself up to periods of rest, in which mind and body were restored to equilibrium after strenuous work.

Constitutionally, he was sensitive and delicate ; he once wrote :

Young as I am, I dislike winter ; in my Republic I shall have perpetual summer, and shut up boisterous winds in a very tight bag except the North and North-East, and these I should execute.

But he possessed great nervous energy and force of will.

He was easy to please, happy in giving happiness, and endowed with such keenness of appreciation of every good gift of earth that some of his friends called him a sybarite ; yet beneath the natural joyousness there was a passionate faith in the supreme value of the human soul, of charity, humility, and purity. Sure in his hold on these, he had no touch of Puritan depreciation of the gladness of life, but insisted rather on the need of understanding and of rejoicing in all good and lovely things. Even for the formalities and ceremonies of social life he had

more than toleration, seeing in them spiritual significance and occasion of service.

For himself, he would seek neither titles nor worldly goods, yet he appreciated them as signs of regard from his fellows and as enhancing a man's usefulness. In a speech in 1893 he expressed this point of view :

There are many things for which men strive. A large number of them can only be achieved at the expense of somebody else, but the best things are different. They are character and knowledge ; and no man has the less of these because you have more. No man is the worse but the better because you are good ; no man knows less but more because you know much. These are the best things, not money, not reputation, not what the world ordinarily calls success—but character and knowledge. And we are helped to attain these by a study of great men's lives.

Viriamu Jones' schooling was not that of the great public school, and in his time games were neither compulsory nor even much encouraged at the Normal School in Swansea or even at University College School, so that he grew up without feeling the need of daily exercise. At Oxford he rowed enough to excite comment from home and warnings against being beguiled from work, enough too for the common experience of a blistered hand, which so affected him when he was in for Pass Moderations in 1876, that he had to ask the help of friends to write the answers from his dictation.

A letter from Oxford in 1881 speaks of nothing more strenuous than tennis and croquet ; but though he enjoyed these outdoor pursuits, he gave little time to them ; games of skill always interested him, so much so that, when living at Caerphilly in 1890, he missed his train to Cardiff before an evening engagement through eagerness to play a game of Halma to the finish, and cheerfully departed by the next—a train of coal trucks.

When he first went to Cardiff, he used often to play fives ; but College committees encroached and the game was dropped. The Saturday afternoon College walk, begun when the Staff first came to Cardiff, was, for him, rather an infrequent pleasure, for he often spent week-ends with



friends or relations. He cared little for any form of exercise without some stimulus, social or physical ; but, writes Mrs. Champion Russell :

when expeditions were organised by Professors and students combined, the Principal was the life of the party. The old Roman iron works were explored by the light of lamps and magnesium wires, with Mr. Galloway to expound the ancient methods, and there were walks over the hills within reach. On such occasions he was always full of good talk, eager to see and know, unsparing of himself mentally or physically. Perhaps he would have been better ' watching the sailing cloud-lets' bright career,' but rest, even in his so-called play-hours, was for him impossible.

I recall one walk along the coast when all our breath was required for kangaroo leaps from boulder to round boulder ; he was the merriest and most inexhaustible of the little party as he leaped and talked—the novelty of the exercise amusing him beyond words.

After the year 1881, when he was appointed Principal of Firth College, Sheffield, his career was as single in its aim as it was uneventful in its circumstances. The question has been more than once asked as to why he did not choose a scientific career. He was, from the first, successful in scientific teaching, both privately and in the laboratory, and Professor Clifton had spoken strongly of his special aptitude for experimental research. In early life he had thought of entering into business for the sake of the leisure such an occupation would give for scientific experiment, and he hoped to be unsuccessful in his application for the head mastership of the Oxford High School, as, if appointed, he feared to have no time for research. But, when, at the eleventh hour, it was suggested to him that he might apply for the post of Principal at Firth College, he did not hesitate, though success meant a career devoted to the organisation of higher education and little opportunity for scientific work. It is probable that he was influenced by the ideals of Professor T. H. Green and by the movement for the diffusion of higher education discussed and approved by him, by Jowett, and other leading men at Oxford. The benefitshoped for as a result of higher education are described by Pasteur in a letter written shortly after the war of 1870 :

La culture des sciences dans leur expression la plus élevée est peut-être plus nécessaire encore à l'état moral d'une nation qu'à sa prospérité matérielle. Les grandes découvertes, les méditations de la pensée dans les arts, dans les sciences et dans les lettres, en un mot, les travaux désintéressés de l'esprit humain dans tous les genres, les centres d'enseignement propres à les faire connaître, introduisent dans le corps social tout entier l'esprit philosophique ou scientifique, cet esprit de discernement qui soumet tout à un raison sévère, condamne l'ignorance, dissipe les préjugés et les erreurs. Ils élèvent le niveau intellectuel, le sentiment moral ; par eux, l'idée divine elle-même se répand et s'exalte.

In 1881 such centres of University teaching were being founded: apart from Viriamu's conviction of the importance of this work, circumstances leading him to look forward more immediately to marriage arose, and thus his original aim of seeking purely scientific work was modified. He wrote on

*Sept. 24th, 1880.*—I shall work like a Trojan (were they good workers ?) to prepare for your coming : and how good that will be for me—otherwise perhaps I might have been lazy and wasted my time eating University lotus, introduced to the land of afternoon by shipwreck on the rock of a good degree !

As his letters show, Viriamu Jones began at Sheffield, at the age of twenty-five, to live in that state of over-work which was to prevail till the end of his life. Not content with establishing Firth College on a firm footing, he at once foresaw its possibility of expansion, and his own ardent temperament, combined with an ever-growing conception of the educational needs of the people and of the practical resources required to realise that conception, urged him to work at high pressure. He was unconscious of his own tendency or of its danger : to see the want impelled him to effort to meet it.

Rabindranath Tagore's words might have been applied to him all through his life :

He whose joy is in Brahma, how can he live in inaction ? So the joy of the knower of Brahma, in the whole of his everyday work, little and big, in truth, in beauty, in orderliness and in beneficence, seeks to give expression to the infinite.

Ten years later, taking a text from Emerson, he wrote :

‘ Too much preparation for life, not enough living.’ People who live most intensely feel this most, perhaps. After all, all life must be preparation and the keenest life in preparation. The mark of life is growth, its joy consciousness of increasing faculty. There never comes the time when one can say : I have prepared to live, and am now going to do so. It is like the man in the Gospel with his goods in his barn. The law of the universe is that when he sits him down to enjoy, his soul is required of him and is taken.

He said of himself that his intellect was mature at the age of eighteen, and the short paper ‘ A Soul’s Dream,’<sup>1</sup> written at twenty for the Swansea Literary Society, showed that he had already thought deeply on the problems of life.

While at Oxford, he wrote that he needed ‘ to be kept human and good and prevented from becoming a one-sided vessel of facts.’ But if this indicated a tendency to over-intellectuality, that tendency was counterbalanced by his deep affections and the spirituality of his nature. With his mental detachment went a keen insight into character and motive, joined to an attitude to others of active kindness. It was to a man’s thoughts that he would most gladly minister, taking the point of view that it is a man’s thought that shapes his life and actions.

People often said they felt better and stronger in his presence, and surprised at their own unsuspected powers, speaking of that

appreciativeness and vitalising quality of his which made one bring out of one’s inner treasury ideas that one did not know were there, so that with him one could talk one’s best ; mind stimulating mind, or spirit feeling for spirit and responding.

He took up his own work joyously, and in it found rest and the fulfilment of life. He had no doubt that work was the best resource in difficulties, and advised :

Seek work of any description. Your mind ought not to be idle. It is a sign of strength to make intellectual progress under difficulties, and thought, vivid thought, ought to live in spite of adverse circumstances.

When quite a young man, he wrote : ‘ “ Remember he

<sup>1</sup> See *Viriamu Jones and other Oxford Memories*, E. B. Poulton, F.R.S., p. 95.

who serves is master," so says Jesus Christ'; and referred to the drudgery of detail with cheerful humour. 'Did you ever hear the beatitude "Blessed is he that can divide his work, for he shall surely finish it"?'

And :

Remember to make use of whatever time you have—and the details, little things that life is made up of, are worth learning, great things cannot be done without them. Don't dwell on the thought of how much you might do if you had more time; it does no good, and sometimes prevents people from doing what they can in the time they have. I have seen sorrow nursed until it becomes a luxury to the sufferer to feel it: it is mere selfishness. 'Look if there be any sorrow like unto my sorrow.' Don't think I am speaking without sympathy. All I say is that such a state of mind is not strength but weakness. If small things are to be done, do them and complain less to yourself than to other people about them. I do not say always do them. But if you do them, be stronger than to pity yourself for it: for if you decide it is your duty, you are doing what very few people do, and are, so far, better than they.

He deprecated resignation, believing that virtue lies in rather meeting the challenge of difficulties, and helping others to meet them in some active creative problem.

Don't take the burden of other people's sins on your shoulders or you cannot be happy. Perhaps this is poor doctrine, and the better is 'Bear the sins of others and know the misery of Christ.' But to do this you must be very strong.

Again and again he showed his respect for human individuality, and insisted on the importance of the development of the will. Rather than attempt to take the burden of another's grief he would strive to rouse a man's own will.

Consciousness of the absence of the power to do anything paralyses all action, and is a sign not of lack of ability to do, were motive power present, but still of helplessness. The steam-engine may be perfect, but it will not go without fuel.

Feelings should not smoulder and smoke—they should burst out and consume themselves.

Never be afraid of open warfare—in general, after it, people shake hands.

If it is worth while to be angry, it is worth while doing it with a will. Storm and sunshine is charming spring weather.

He believed that happiness is the rational condition of the man whose activities are fully and usefully employed ; that it is the response of our nature to the true, the good, and the beautiful—that the man who accepts the law, in accepting transcends it, and so finds complete liberation :—happiness.

Yet he was careful not to influence anyone's free will ; when asked for advice or appealed to on matters of principle or conduct, he gave his opinion quite dispassionately, and generally expressed in terms of naked truth. This sometimes caused him to be judged so severely just as to be lacking in human sympathy, when it was rather an expression of his desire not to persuade or influence his hearers, but to place before them such views as should enable them to decide for themselves and accustom them to rely upon their own judgment.

Throughout his life his friendship with his sister was very close and tender. Her joys and sorrows, and the welfare of her children were very near his heart. In 1878 he wrote :

I have been learning to make smoke-rings for Penmôrlan's special benefit, they are very pretty. You don't say anything about him in your letter.

During his first years in Cardiff, they saw each other frequently, but the opportunities for such happy meetings grew rare. Viriamu's scant leisure became scantier ; his visits were almost limited to colleagues in London or Wales or to the necessities of work, and after his sister's marriage with Mr. S. Home, Registrar of the High Court at Swansea, a young family absorbed her energy and care. For two years, her eldest son, Penmôrlan Maine, lived with his uncle and attended the College at Cardiff and the association was as happy for uncle as for nephew.

Another instance of his interest in young people was shown by his guardianship of the two younger children of his life-long friend, Frank Ash Yeo, which began on Mr. Yeo's death in 1888.

The responsibility for their welfare was the occasion of much intercourse, while the sympathy of tastes between him and his wards and his friendship for their mother made the bond a very happy one.



In 1890, Mrs. Yeo wrote asking the Principal and his wife to visit her :

Let it be for a little time as in another home instead of Caerphilly ; to us your coming is full of brightness and pleasure and we beg you to spare us as much time as possible. I feel as though it were a son and daughter coming home.

His step-mother and he were great friends, and she was often welcomed in his home ; he admired her vigour and independence of character and was always entertained by her trenchant, unabashed mother-wit. Mr. Woolcott Thompson, who often saw them together, said : ' His manner to her was perfect, and the mutual affection, in a relationship which is not always quite a happy one, was very pretty to see.'

Throughout his life, women gave him their friendship.

Frances Willard wrote of his ' home consecrated to the uplift of humanity ' ; Mrs. Ayrton talked with him of her scientific work, sure of his keen interest therein ; while Mrs. Eva McLaren, Mrs. Massingberd, Lady St. Davids, and others who were working for larger opportunities for their sex, were delighted to find him already in sympathy with their aspirations.

In the summer of 1889, Viriamu Jones and his wife were at Ben Rhydding. Professor Rhÿs Davids was staying there, Mr. Jesse Collings and his daughter, Mrs. Field, Miss Isabella Ford, and her sister Miss Bessie Ford. Miss Isabella Ford had recently been the victim of a carriage accident, and reclining on a long chair on the lawn she held her court every afternoon. Every interesting person of that little world was drawn within the magnetic field : and there Professor Rhÿs Davids told stories of Indian folklore ; Mr. Jesse Collings tried to establish the justice of the denial of the parliamentary franchise to women ; Mrs. Field related strangely vivid psychic experiences—everyone brought their best entertainment to the lady in the chair. Later, Miss Ford stayed at the Principal's house at Cardiff and remembers now the good talk of men and things, keen and merry, stimulating and serious : and that extraordinary freshness of interest in men and things, which Lord

Carlisle and others who knew him well looked upon as one of his most distinctive intellectual qualities.

During the first six months at Cardiff, he daily suffered acute pain. It was a time of heavy work and responsibility, and, in the moments of respite, the very intensity of the relief induced in him the idea that the need for care was over. He was besides so intently interested in his work, so identified with the happiness of its advancement, that to an extent known to few he was unaware of his own physical condition.

But no one believed more than he did in the importance of bodily health and the cultivation of healthy habits, as is shown by his speech to the College Council in 1886 on the need of a field for the students' Cricket Club :

I do not hesitate to recommend this very strongly to the Council, feeling that they will be helping forward in truest fashion the education of our students by assisting the development of that respect and care for physical well-being and perfection which is not antagonistic to moral and intellectual elevation but rather in deepest harmony with it. An infusion of the athletic ideal of the Greeks into our Celtic character would promote mental and spiritual growth. The Eisteddfod would be better if there were also Olympic games.

To his students, he said :

Let me remind you that education does not mean intellectual development only ; a good education is the harmonious development of all the faculties. You must not neglect your physical education—the training of your bodies. A young man rarely realises how largely his success in life, whatever position he occupies, is dependent on his physique. It is the instrument with which you must work ; treat it well. Many lives would be longer, finer, with nobler result, did young men in the plenitude of health and strength realise the need of care in this respect—the need of exercise, and the absolute importance of moderation and temperance in all things.

As the burden of administration grew heavier he gave, too little care—in term time especially—to considerations of health. When his assistant, Mr. Harrison, used to remind him that he was working too long and too late, he would reply that if a man could take a summer holiday

in Switzerland, it mattered little how he fared as to exercise for the rest of the year. In vain, then, were exhortations as to the behests of the ' Bull-dog '—the name affectionately given by Mr. Harrison to the Principal's doctor.

As to these ' summer holidays in Switzerland, ' our interest's on the dangerous edge of things ' was true for him as for many a mountaineer. But it was danger fairly met; he always kept the rules of the game upon the mountains, and no one was more prudent, or, with due precautions taken, more daring. He often quoted Monsieur Loppé, the Swiss artist, and a veteran Alpine climber :

Il n'y a pas de montagnes dangereuses : il n'y a que des personnes qui sont dangereuses sur les montagnes.

Whenever possible, his companion on the mountains was Jack Wills, of whom he wrote later :

Jack was not a mere climber but a true mountaineer—a good guide—quick, it is true, but most prudent and cautious and quite willing to go slowly, if asked. The mountains have been to Jack an intellectual problem—and he knows how they are made, how they are arranged, and how they are to be ascended.

Together, without a guide or porter, they climbed one day to within an hour of the summit of Mont Blanc. Having slept at the Pierre Pointu with intention of a shorter walk, a brilliant morning tempted them to the longer expedition ; they passed the people who had slept at the Grands Mulets, and, ascending steadily, were most disappointed in not being able to go on and reach the summit, both being too lightly clad for the high altitude. Viriamu Jones felt no inconvenience, but the taller man could not stand the keen wind blowing across the snow at this great elevation, so back they came, delighted with the walk. With Fournier, a man from Haute Savoie who had climbed with Jack Wills and became a guide, they went up the Eiger and the Jungfrau in a single day—probably their longest walk. With him and another guide they went up the Aiguille du Dru, returning just in time to escape foul weather. Once in the valley of the Eagle's Nest, at the upper part of the Viriamu

Couloir, a rock gully with scanty foothold, they climbed, each asking of the other from time to time if he thought it 'all right,' and so complete was the confidence of each in the other's 'Yes' that no doubt was felt until they found themselves face to face with a formidable projecting rock. Descent was impossible; to ascend farther looked equally impossible: they spoke what both knew might be last words, and then made the attempt. Their foothold, though of the smallest, was good. Jack Wills, the taller, climbing from Viriamu's shoulder and stretching over the bulging crag happily found a safe grip and pulled himself up to a ledge big enough to lie securely face downwards and reach down a hand. To this place of vantage Viriamu hauled himself up, and their anxiety was over. It had been sharp, indeed; neither told of the adventure for several days.

Viriamu loved the mountains; the sombre slopes:

Where, at a funeral pace  
Round about, solemn and slow,  
One by one, row after row,  
Up and up the pine-trees go.

Still more, he loved to be up in that remote world of snow and ice under the deep blue heavens and, from their lonely serenity, to descend to rest and comfort after toil.

They became to him an image of his own experience, as expressed in a New Year's wish:

May it be full of joy as a light summer haze of sunshine when it fringes the landscape's verge; and serene as the deep blue of the topmost summer sky. What a blue it is against the white snow!—the high intellectual paths. But these high places are a joyous home only when one can descend in the evening to the valleys and their deep delights. Then the serenity begotten in a man up there amid the forms of ideas becomes radiant and the stream of his living energy may kindle a world to diviner life—waking the sleepers as the sun at dawn!

Three weeks after the beginning of the vacation of 1884, Viriamu Jones, with his wife, went to Canada at twenty-

four hours' notice, for the meetings of the British Association at Montreal, spending a month in visiting Niagara, Ottawa, Winnipeg, and the Rockies before the meeting which was to prove a memorable one for the discussions between Lord Kelvin (then Sir William Thomson) and Professor Rowland. The meeting was opened by Sir Oliver Lodge with a lecture on electricity—then in its infancy in England as regards its practical application—in which he showed remarkably beautiful experiments.

Starting a month before the main body of the Associates, Viriamu Jones and his wife travelled in uncrowded comfort. On July 18, they passed the Giant's Causeway, and in his diary he characteristically comments on the 'mountains of Donegal of strange, fantastic shape—probably good walking.' On the sixth day, in the afternoon and evening, mist delayed the boat, and she was obliged to turn back out of the Belle Isle Straits. The exceptionally hot summer had set free huge masses of ice which lay across her course ; but before dawn the next morning she had re-entered the Straits and at 4.30 a.m., at the first report of ice-bergs, every one rushed on deck half dressed to see towering pinnacles, most weird in shape and wide fields of ice, their sides dazzling white cliffs, rising a hundred feet out of the sea and showing exquisite blue-green and violet clefts, while, on their edges, penguins perched. Shivering with cold, but fascinated by the spectacle, those on board watched till noon, little guessing that a tragedy was preparing. After leaving Moville, the ship's doctor rarely appeared : he was mounting guard over the cabin of an Irish informer, feigning illness, who with his wife and child had shipped at Liverpool, and was tracked by men who came on board at Moville. At Quebec, one of the travellers stepping into the luggage-van to look after baggage, knocked against a hard object which proved to be the muzzle of a pistol pointed towards the door by the doomed informer, crouched half-hidden, in mortal terror of his relentless pursuers. Certain to be shot as they went west, he was still desperately hoping to escape and join his wife and child farther down the line.



Viriamu Jones and his wife—the latter the only woman to take the journey to Laggan—stayed a few days in Winnipeg, then a city of unpaved roads, in which the rich, black earth was sun-dried into big ruts. High above these ruts, or the deep soft roadway which was their alternative, wooden pavements connected the houses in the streets, but these were supplied with electric light and other modern appliances for comfort.

They travelled westward, across green plains, flat as a billiard-table, stretching on all sides as far as the eye could reach, with never a tree and only rarely a few bushes, or rolling prairies of endless green billows, unmoving and immense. Hotels—i.e. wooden shanties—supplied the travellers at intervals with meals of delicious bread, white—probably hot—rolls, hard beef-steak, and tea and coffee made with tinned milk and distinguishable only by their names. The express ran twice a week at the rate of seventeen miles an hour, pulling up from time to time in the midst of the prairie or wherever it chanced to be, to lose the half-hour or so it might have gained by previous excessive speed. This was the traveller's opportunity. Botanists searched for rare plants, sportsmen shot at the astonished little 'gofers,' till the bell on the engine rang, and with a general scramble on to the high step of the carriage, three feet or more above the ground, the travellers resumed their places.

At Calgary, then a small collection of plank houses, telegraph posts and wires were being erected for and alongside of the Canadian Pacific Railway; and the Indians were reported to be unsettled and mutinous, their complaint being that they did not know whence the wires came nor whither they were going. Those who loitered at the station looked weary and depressed; but in the woods there were glimpses of wigwams and of small hammocks for babies, and once of three or four small brown boys being schooled to shoot at a mark, merry and alert as they ran to pick up their arrows.

In the train of workmen's cars, with gambling and swearing on all sides but no lack of hearty kindness, the party

left Calgary for Laggan, then the farthest point of the railway line. Soon after Calgary, the spurs of the Rocky Mountains rose to right and left; limestone precipices, crags, and peaks towered above black pine woods; far below, the train 'crawled over trestles something over a hundred feet high and looking like a collection of match-sticks, but solid in spite of their pigmy proportions.'<sup>1</sup>

Near to Laggan they saw snow-peaks and glaciers. There they found Moulton's Royal Hotel, a log cabin at least seventeen feet high including the chimney, and behind the hotel was the forest of pine and oak and the untrammelled undergrowth of the hill-side;<sup>1</sup> the few clearings being marked out by the line of overturned tree-roots. The 'hotel' was festooned within with butter-muslin, and its largest room was almost filled up by a worn billiard-table; beyond was the kitchen with a table screened off and called the dining-room; behind again were sleeping-quarters—a shed some sixty feet in length—that is, with two or three tiers of shelves for row upon row of sleepers, three deep on each shelf. The proprietor directed the three English travellers to superior apartments across the railway line, the High Street of Laggan. Here were half a score of divisions eight feet by eight, built of thin planks with loose strips of paper hanging from pins over the slits that gaped between the planks. This ensured a sort of privacy of the eye, if not of the ear, since the conversation, even the movements of every one's neighbour, was distinctly audible.

There were about three hundred navvies working on the line—Irish, Scottish, English, American, Swedes, and Chinamen. The only woman was the good soul at the hotel who insisted on cleaning the travellers' boots and shoes because she said she saw they were not used to doing them, and who, when they left, would only express a modest wish for a supply of needles and cottons.

Viriamu Jones walked to Kicking Horse Pass along the sleepers of the half-finished railway line; magnificent limestone mountains, glaciers, and pine woods ranged in

<sup>1</sup> Rudyard Kipling, *From Sea to Sea*, pp. 23 and 19.

endless procession east and west as far as eye could reach—and here in the heart of the Rocky Mountains the human and peculiar indications of the settler's activity interested him very much. The 'Tonsorial Palace' was a meagre tent pitched on rough ground near the railway embankment; another tent announced on its four-foot end of canvas, below the name of its owner, 'Attorney, Barrister, Notary Public, Justice of the Peace'; within it dwelt the brother of a Canadian judge. As the party passed, this embodiment of the law was watching a pot suspended from a tripod, which gave forth appetising odours, promise of his supper. His seat, near the fire, was an inverted wooden case supported on his law library—two thick old volumes lying on the ground; he praised the 'good life and profitable,' for men who came to that wild region for the settlement of disputes as to boundary lines between Canada and America paid big fees and ready money.

Returning eastwards, Viriamu Jones made the acquaintance of the Indian chief, Standing Buffalo, who received the party near Fort Qu'Appelle with a diminished retinue, but clad in the embroidered garments of ceremony. Viriamu Jones asked his acceptance of some tobacco; he gravely handed it to his Prime Minister, custodian of the pipe of peace with the red pipe-stone bowl, who lighted and drew the pipe and then presented it to his chief. Standing Buffalo, through his interpreter, then observed that the giver must be 'a great agent in his own country to smoke such good tobacco!'

Five dollars a year a head and instruction in the art of agriculture on the reserves offered by the Canadian Government after the gradual occupation of the prairies by the white man, together with the official destruction of the buffalo, have hardly softened the Indians' doom of slow extinction. The Hudson Bay Company, through its agents, had been their best resource for many years, supplying them with food in exchange for skins, and even employing them in positions of trust in which the red man, whatever his necessity, was found honest and reliable.

One attempt Standing Buffalo made, but made in vain,

to win a lasting and valuable memento of his meeting with our party; looking firmly at Lady Douglas, who wore several rings on her ungloved left hand, he said: 'When a noble squaw admires a great chief, she gives him a ring.' But this was not to be their last impression of Standing Buffalo. Dignity and the pathos of a dying race were strangely blended in his bearing as he mounted his small horse and rode away with singular grace, followed by his little mounted company of six or seven.

The party now returned to Montreal, where the members of the Association were by this time assembled. The American Association and many of the English visitors met again at Philadelphia soon after the Montreal meetings, and on leaving Philadelphia, Lord Kelvin went to Johns Hopkins University to lecture; but in spite of the interest of the occasion, Viriamu Jones was not ready for more meetings, and instead spent some days in New York with his brother Irvonwy, who had come from Texas to meet him, and then went on to Philadelphia. It was the Indian summer and very hot in the cities, though New York with the thermometer at 88° felt much hotter than Philadelphia at 96°. While in New York, Viriamu Jones visited the Bowery Theatre with his brother and saw—saving the presence of the negro—such scenes as Bret Harte might have described. There was the familiar bar, the black waiter serving American drinks, protected by notices on the wall above his head: 'Don't shoot the bar-keeper: he means well,' and the like. Irvonwy—who had some experience of that society in which a man who sees his companion's hand move towards his hip-pocket, anticipates attack by shooting first—told of a man he had known in San Antonio whose violent and hasty disposition had led him to kill so many men in this fashion that he was warned to leave the town on pain of death. For some time he gave heed to the warning, then, with the call of the old haunts in his ears, he announced his intention of returning to visit the theatre. While escape was yet possible he lounged in, despite all warnings, but he saw no play. Men sworn to avenge dead friends



were ready for him, and, as he reached his accustomed seat, sixteen shots rang through the house.

Viriamu Jones returned to Cardiff in September, and his College work began at once. On two sides of his work, apart from organisation and its public aspect, he laid special stress: one concerned his students, the other his scientific work. In relation to the latter, he attended the meetings of the London Physical Society whenever he could. The students were invited to his home. As years went on, in spite of the accumulating demands of College administration frequently summoning him to London and elsewhere, each student was invited to his house once in the session—till the number mounted to 400, when he could only invite the third and fourth year students in this way. He preferred four or five to come at one time rather than larger parties, and often spoke with regret of the restricted opportunities of these intimate meetings. And it was to him a sad necessity—one which he put off as long as possible—when he had to give up teaching altogether, and thus lost that opportunity of personal intercourse with individual students.

His first speech was made at Firth College at the opening of the Session of 1881.

Among his papers only a few speeches were found written out in full; notes had to serve his purpose. During the first year or two of his life in Cardiff, he used to write out the most important points of a speech, and practise speaking them aloud in his study, as his father did before him. Yet he was by no means confident of success.

*Oct. 19th, 1884.*—No news except that I made a very bad speech yesterday at the luncheon: and very much wished for the comfort and consolation of your presence after. I wait here at least till four o'clock to-morrow to hear Reichel's introductory address (at the opening ceremony of the College at Bangor).

His speeches dealt continually with the need of education for the people: that, as individuals, they might by its means attain to their highest standard of spiritual, intellectual, and physical development, and, as members



of the community, take part in the creation and realisation of the ideal Christian commonwealth. Inasmuch as education, as he conceived it, could further this end, he felt impelled to use every opportunity to stimulate the interest of his countrymen.

Long before the passing of the Intermediate Education Act, intermediate, technical, and, later, university education, were the subjects of many of his speeches. It was his custom to give a plain and business-like yet vivid analysis of the provisions of these Acts in detail, dealing with finances and organisation schemes, and appealing for co-operation in such schemes; he had a special gift of presenting full explanations both of the machinery and the end for which it was devised. Such subjects, so treated, won the close attention of his audience, and, through all the careful unfolding of the most technical points, glowed the sustaining faith by which he worked. Coming home from a meeting—probably in the 'nineties—when he had spoken with his customary incisive clearness and fire of conviction, a man stopped him to express his thanks. A bystander, hearing the friendly tribute from an uneducated man, expressed surprise that Viriamu Jones should be so pleased; he replied, 'I am so very glad to know they understood what I wanted to tell them.'

Perhaps he was hardly conscious of his own power; but when Parnell spoke at a large political meeting at Cardiff, Viriamu Jones over and over again expressed his astonishment that a man of such cold demeanour should produce such an intense effect. He himself found inspiration in the warmth and sympathy of his audience. He used none of the phrases or arts of the orator or politician, but would hold an audience for a speech on educational details, closely reasoned and unrelieved by any lighter touch. He made even statistics interesting.

His style as a public speaker was due to the accurate fitting of word to idea, and the clear reasoning, careful arrangement, and development of his argument: the source of his power lay in his absolute sincerity, and confidence that his audience would appreciate the application of the

subject to their own lives, and the community of which they were the members. 'He sometimes confessed,' says a colleague, 'that public speaking exercised a strange fascination, remarking in a whimsical manner, "the reward is immediate."'

I can remember now the effect of his Welshman's oratory when he addressed the College [writes a friend]: not the actual words, but the rousing call to disinterested effort and self-sacrifice, his dislike of petty aims, his generous appreciation of success in others and of help in his own work. I can see him still, his face alive with feeling, not much gesticulation, but his whole body aquiver with the thought he wished to utter; and the audience tense and ready to break out into applause as only a Welsh audience can.

Indeed, 'if oratory be the art of persuading by speech,' said Sir Harry Reichel, 'then unquestionably Principal Viriamu Jones was one of the first orators of the day.'

Viriamu Jones was in the best and truest sense a patriot. He believed strongly in that conception of nationality which gives complete freedom to national efforts towards progress and encourages national originality; and saw no danger of nationality of this type degenerating into a narrower form. In January 1885, at the first meeting of the Cambrian Society for South Wales which he had helped to found, he was asked to move a resolution and began by praising the circular convening the meeting, because, he said, there breathed through it a true national spirit.

It seems to recognise the fact that the Welsh people are a nation, and there is in it an encouragement to the Welsh people to recognise that fact, and to derive all the benefit that will, and must, follow such a recognition properly made. What is it that constitutes a nation? What is it that binds isolated populations in towns and counties into a national unity? There is, in the first place, the unity of race, with all the common characteristics which it implies; in the second place, there is the binding together due to their possessing a common history, common external surroundings; next there is the bond of a common language and a common literature. Now, the Welsh people boast all these characteristics, and great benefit will arise from every effort to recognise the fact that the Welsh are a distinct people, having distinct duties to themselves as a

nation. When Welshmen begin to realise the fact that they have a national unity, they do not proceed to political ferment and to 'blowing people up,' but they consider that they have a national language to which they owe a duty, a common literature with which they ought to be familiar, a common history which they ought to know.

The time has arrived for the formation of a society in South Wales, having for its object the promotion of literature, music, and art, the collection of books and manuscripts relating to Wales, and the discussion and promotion of questions of a national character that may prove of interest and use to the inhabitants of the southern portion of the Principality.

At the St. David's Day celebrations of the Cambrian Society in March 1885, referring to the objects of the Society, he said :

These are to promote the national interests of Wales. It is a sad thing to reflect upon that there is no history of Wales—that it remains to be written. We cannot make a historian : a historian is the gift of God. But by collecting manuscripts and disseminating literature we can do a great deal to supply the defect that has so long existed.

After speaking of the constitution of the society he said :

The Welsh character will need interpretation from time to time. Without such interpretation they will not be thoroughly understood by the Government of the British Empire, an Empire of which Welshmen are proud to form a part. The Welsh have a distinct character. When I speak of this distinction, I do not wish it to be understood in a political sense. No one would deplore more than myself the national spirit in Wales taking the form of popular clamour for Home Rule or Imperial disunion. The revival of the Welsh national spirit should achieve a closer union with England. If a Welsh party is ever to be formed, its duty would be to interpret to the Government the needs and interests of Welshmen in a higher sense than they had ever been interpreted before.

On St. David's Day, at the College celebration in 1885, he touched on the national characteristics of Wales in the past, as shown in the life of their patron saint.

He, according to legend, was educated at the school of St. Iltyd, at Llantwit Major, to which great school Cardiff was by locality the natural successor. St. David was very great in theological controversy. Perhaps the most remarkable episode in his life occurred at Llanddewi-brefi, in Carmarthenshire, when

he was summoned to refute what was called by Giraldus pestilent heresy. This, it was said, he did with signal success by the help of miraculous interposition, for assembled on the plain was a great multitude, and St. David, being short of stature, could neither be seen nor heard. But the ground on which he stood rose beneath him lifting him to the summit of a hill : which hill remains at Llanddewi-*pre*fi to this very day to prove the truth of the legend. Our patron Saint has bequeathed the taste for theological controversy, which is a characteristic of the Welsh people to the present day. I well remember a story told by my father—that one day when he was walking in Mid-Wales with an English doctor of divinity they came upon two stone-breakers very earnestly discussing the doctrines of original sin and freedom of will. That love of theological controversy brought out one of the reasons why St. David's life has taken such a deep hold on the Welsh people. In proposing the toast I am not asking you to drink to the memory of one man alone, but to the prosperity and success of the nationality to which we are proud to belong. George Eliot said that national memories were an element and means of national greatness, and as Welshmen we must not forget our distinctness as a nation.

His strong sense of the importance of giving free play to the national genius in its own University was expressed ten years later in a letter written in November 1895 :

The North Wales Court Meeting is the beginning of a new campaign. It will result in the division of the sheep and goats from the Nationalist point of view. The question is whether the University of Wales is to be dragged by its Colleges at the heels of the University of London or not.

Speaking, as Vice-Chancellor, to the Governors of the North Wales College, on the previous day, he said :

The University came into existence sooner than most of us dared to hope, ten or twelve years ago, and this fact teaches all those who are concerned with public affairs in Wales two very important lessons. The first is not to pursue the abstract but the concrete, and the second is to realise the enormous additional force obtained by the union of the North and the South. What we have to do is to let no traditional divergence between the interests of the North and South or the different parts of Wales stand in the way of our working together with perfect unity of purpose for the achievement and consolidation of a great national institution, and for the development of the best that is possible out of our Cymric characteristics. . . . As to the relation



between the University and the colleges, asking the Government for a charter means a declaration on the part of the Colleges that Wales must henceforth in matters of academic study be the mistress of her own destiny. The duty of the colleges is to devote themselves exclusively, as far as the facilities provided by the University are concerned, to framing the best possible schemes of study according to the light that is in them, and to guide their students in the free air of intellectual independence through those schemes of study to the degrees of the University they have been instrumental in bringing into existence. We shall have to remember that, as colleges, we cannot be both free and bound ; that we cannot serve both the University of London and also discharge the responsibilities we have undertaken in calling the University of Wales into existence. If London satisfied us, why did we seek a University of our own ? If London does not satisfy us, why should we encourage the students of Wales to take an unsatisfactory course by providing it for them ? For those of us who have faith in the star of Wales, and belief in the genius of the Welsh people, and who have convictions with regard to the possibilities of the national development on the intellectual side, there is but one course open : it is frankly and without fetter to devote ourselves to the building up of our national University under the powers conferred upon us.

Our duty is plain. Who hesitates in the matter is lost. If we hesitate we shall bring about precisely the state of things some fear ; if we are bold, Wales will reap a rich intellectual harvest from the seeds we have sown.

Another manifestation of the same national movement touched his professional work. The lack of adequate teaching in English or in Welsh in the elementary schools of Wales was brought home to Viriamu Jones through the difficulties of his students very soon after he came to Cardiff. In North Wales, Mr. Beriah Gwynfe Evans and in South Wales, Mr. Dan Isaac Davies, H.M.I., called attention to the neglect of the children of Welsh-speaking districts in the elementary schools, and ultimately a society was formed for the Utilisation of the Home Language of Wales. Viriamu Jones was one of the first members. The same lessons were being given in the elementary schools of Wales as in those of England ; English reading-books were put into the children's hands, poetry and other subjects taught in English without explanation, unless a teacher voluntarily chose to explain and could do so in the vernacular ; and this



while the children spoke Welsh at home and attended Welsh Sunday-schools. As was inevitable, they generally 'lost their English' directly after leaving school, and when grown up they could take no positions requiring a knowledge or understanding of English. Viriamu Jones and other educated Welshmen thought that if these Welsh children were taught English through Welsh, if they acquired an English vocabulary by learning that certain English words corresponded to certain Welsh words, they could gain the language of commerce, law, and administration through the use of their own language. Mr Beriah Gwynfe Evans tells this story of the effect of the regulations which the Society aimed at changing.

Carried away by the prevalent idea that Welsh must at all costs be banished from the school, I laid down in my own school the hard and fast line that, under no circumstances was a word of Welsh to be uttered on the school premises. The rule was rigidly enforced. My school passed well. One day two lads of the ages of eleven to thirteen came to school an hour late. Summoned before me, they were asked where they had been. 'Please sir,' said one of them, 'I am dead.' Imagine my surprise to hear a boy tell me in cold blood that he was dead! 'You are dead?' I asked in surprise. 'Yes, sir,' said he gravely, 'I am dead on the road.' Breaking through my own rule, I asked in Welsh and found at once that the lad had been ill on the road to school, and the excellent education he had received, so praised by the Government Inspector, had failed to teach his intelligence the difference between having been ill and being dead.

Viriamu Jones pressed home the question in his letter to the Lord President of the Council :

January, 1886.

MY LORD,—I trust I may not be deemed intrusive if I lay before your Lordship my opinion of the importance of having a representative of Wales on the Royal Commission which I gather from the public press will shortly be formed to inquire into the working of the Elementary Education Act.

In one respect the relation of the Principality to the Act is exceptional—the bi-lingual difficulty in the country districts requires very careful attention. The Welsh language has a very real hold upon the people, and an influential society has recently been formed calling itself the Society for the Utilisation of the

Welsh Language in Education. It is, I think, important for the Commission to determine whether the language can and ought to be so utilised, and if so to what extent and how it can be done.

Trusting that your Lordship will pardon me for offering this unsolicited opinion,

I remain, my Lord,

Your obedient Servant,

J. VIRIAMU JONES.

To enforce the policy of the society entailed considerable sacrifice of time, the most precious gift that the Principal had it in his power to give.

In March 1886, he wrote to his wife : ' I have been at Committee Meetings for utilising the Welsh language all the afternoon—and have now to hurry off to a lecture.' But he gave it gladly, for it was felt by all concerned that Welsh, as the language of the home and the pulpit, would survive of itself ; and that to utilise it as an instrument for gaining the mastery of the English language would certainly strengthen its hold upon the people and give it new life. Educationally, the effects of such a measure would, he said, be very valuable : and he elsewhere expressed it :

The very act of knowing that the same thing could be said in two languages is an intellectual discovery. Nothing is so certain to make a boy endeavour to grasp the meaning of a sentence fully as having to express it well in another language.

After his zealous labours to secure this reform Dan Isaac Davies died at an early age, having won the lasting gratitude of his countrymen in South Wales.

Viriamu Jones began to learn Welsh soon after he went to Cardiff, to quote his own words :

During the interval of absence from Wales between the ages of three and thirteen, a great misfortune befell me. It was this : I was translated to the modern Babylon, hung up my harp in the willows, and forgot my native tongue ; since returning to Wales and being present at an Eisteddfod, I came to the conclusion that of all the most benighted persons to be found, one of the worst is a Welshman who did not know his

own language. Therefore I set myself to work and look forward to the time when I shall speak not in English but in Welsh.

Before long, he read Welsh easily, and the pronunciation presented no difficulties to him ; he liked to compare the pure vowel sounds of Welsh and French with the mixed vowel sounds in the English language. But, if any, his opportunities for speaking it were few, and it is unlikely that he ever held a conversation in Welsh. Letters, however, show that he was sometimes appealed to for criticism of some Welsh literary expression or on a point in spelling.

From 1883 the principle of nationality was a growing force in Wales and Viriamu Jones' own words show that, so far as he had power, he determined to guide it to great ends.

May Wales judge wisely of the things she ought to desire, and work joyfully until they are attained. May she put far from her all narrowness and exclusiveness of spirit, believe profoundly that God has given to her a mission and a part of her own to perform in the evolution of the high destiny of man, and may she gird herself to the task with simple earnestness and eager faith, thankfully recognising that it is to be accomplished not by force of arms nor in political isolation, but by intellectual and moral eminence in closest contact and heartiest sympathy with all portions of the great Empire of which she may well be thankful and proud that Providence has willed she should form a part. But to lead a great life she must examine herself, and become familiar with her powers and characteristics ; she must cultivate a sterner self-respect and grasp a larger measure of the royal gift of self-possession.

Self-knowledge, self-reverence, self-control,  
These three alone lead life to sovereign power.

He believed in the possibility and advantage of the devolution of governing functions without political separation or isolation ; he saw the limitations of the English character, but admired and respected its strong and positive qualities. In common with many Welshmen he loved London, and never ceased to delight in the beauty of its parks and open spaces, its handsome streets and buildings. On his frequent visits there on College business, he marked the changes planned by the London

County Council : ' This prodigious London—how beautiful it is becoming ! '

After visiting the House of Commons, he wrote :

This terrace too, by the Thames, beneath the towers of Westminster ! what thoughts arise, as one walks to and fro ! The glancing river, the crowded steamers and the atmosphere full of sunshine, its very murkiness the cause of an added glory as the sun slopes to the west, how beautiful it is—and through the air comes the hum of the great city, the greatest city the world has ever seen ; and the steamers and their good-humoured crowd—and the sense that one is at the centre of Empire. Ah ! one feels here the might of England—something of the feeling I had during my first visit to the Mediterranean comes upon me here. We lunched at Gibraltar to find British redcoats—at Malta, the sight of them made us feel at home—at Cairo we found the citadel in their possession, and one realised what it is to be an Englishman—marched with a prouder tread. Yes, travelling makes one understand Empire. To go round the world and meet everywhere the English-speaking race. Well, I may be mistaken, but the might of this land, the mother of nations, comes home to me—and I rejoiced to have sprung from her loins. And I have the same feeling here—at the centre of the great Empire. Yes ! it appeals to the imagination.

Viriamu Jones rarely talked of the methods of education, but, at the opening of the County School, at Merthyr, in 1897, he suggested a definition of education in its largest application :

What is education ? This is a question easy to ask and perhaps difficult to answer. Before entering the room, I put it to your chief mistress, Miss Heppel, and she gave an admirable answer : ' The aim of the educator should be to teach the boys and girls to teach themselves.' I put the same question to Miss Hughes with a request that she should answer it in a single phrase, and she said : ' Preparation for life by a cultivation of the whole mind.'

These are general views : I want to make them more real by applying them to the curriculum of this school. Some parts of the curriculum seem specially designed to develop certain aspects of the nature of the boys and girls in the schools. There is great wisdom in the phrase ' A healthy mind in a healthy body,' and I think that it is our duty to pay attention to the physical training of the children in our schools. We should have great care of and reverence for the body ; firstly, care of the



health; and secondly, training of the body so that it may be the deft servant of the will: so that it may be rightly thrown into harmonious relationship with the outside world. In regard to health we should pay attention to the gymnasium and the bath—the training of the muscles and the training that is next to godliness. But have schools done all they can by the training of the mind? No, for a man may have all that training and yet be neither cultivated nor good, and cultivation and goodness are the chief educational problems to which all the rest are subservient, and in relation to which all the rest are to be considered and answered. To be cultivated is to be readily and nobly moved by noble things and good actions—and to have ready sympathy and gentle courtesy. Can we provide for this by curriculum? In part I think we can, by making adequate provision for hearing fine music, especially choral music; by showing to the children beautiful works of art, and by reading great literature. Children will love great things if they see and hear them, and noble things in human life and actions will appeal to and call out their love and admiration. But the most potent influence is the personality of the teacher. What the teacher is, and his attitude to life showing itself in a thousand and one ways, will always determine more than anything else the true culture conferred by school training on the boys and girls in the school. Then, in my opinion, what is of the greatest effect on the spiritual and moral aspect of the school is the training of the will. There are men like automata; men who, in the presence of an imagined pleasant sensation, cannot help responding to that sensation; men who act as if their consciousness hardly comes into the matter at all; men who act regardless of motives. The opposite is a man of self-control; a man busy in the pursuit of a great ideal, who sees his ideal in a luminous atmosphere of faith and endeavours to make it actual. This strength of will can hardly be provided for by any part of the curriculum, and its cultivation will depend upon the spiritual and moral atmosphere of the school. Your scholars should be trained to be men and women of clear intellect, of trained powers of observation, of strong will guided by right aims; they should be taught to reason soundly upon all matters of knowledge with which they have to deal. The two great instruments of the training of the intellect seem to me to be a study of language, which is an expression of thought, and a study of mathematics and dynamics, which are the first application of thought to nature. The study of classics and mathematics has an almost exclusive place in the great public schools, but you cannot translate English into Latin unless you understand perfectly well what the English means. And that is why I always regard the learning of Welsh of such use in our schools. If we can accustom children to translate from one language to the



other, we are introducing into our elementary schools the very instrument for the training of the intellect which has played so important a part from time immemorial in the secondary schools of England.

He wrote to his wife :

*December 1888.*—What is the good of education if one cannot play the game of chess called Life the better for it ?

Of the social value of education he spoke at Sheffield in 1881 :

It has been well said that 'They are never alone that are accompanied by noble thoughts.' Further 'We know what we are, but we know not what we may become.' The age in which we live is an age of education. I will go further and say that this is the best that can be said of it. It is not an age of peace ; there are wars and rumours of wars. It is not an age of faith ; authority is being questioned on all hands, and the traditions, even the foundations, of the Churches are being examined with a touch something less than reverent. But it is an age of intellectual development and the diffusion of knowledge ; and however much we may be out of sympathy with its hurried rush to found large conclusions on the natural knowledge we have acquired, yet it is our duty to sympathise and be in harmony with it in its desire to propagate that and other knowledge among the people. This, then, is the first reason why we ought all to feel deeply the need of intellectual development, because if we do not, we are out of harmony with the best side of the spirit of the age in which we live. The second reason is that, without this feeling of need, great intellectual progress in an individual, a town, or a nation is impossible. To take an illustration from a higher region : it was an old doctrine that consciousness of sin must precede spiritual regeneration. It is an exact analogy that consciousness of ignorance must precede intellectual regeneration. If we realise our need, we are not far from entering into the Kingdom of Knowledge.

These ideals inspired his daily work.

He was a born teacher ; it was an actual pleasure to him to open 'the gates of delight' to others. In his own subject he had the clearness of perfect knowledge ; he had, too, the faculty of seeing the beginner's difficulties and a wonderful patience. Yet he was sometimes dismayed by the want of grasp in his hearers.<sup>1</sup>

<sup>1</sup> Mrs. Champion Russell.

During my first year, writes a student, I came under the Principal's influence in the Junior Class in Mechanics. It was the last year during which he took the class, for, as the burden of his administrative work increased, he had to give up his classes one by one, and the Junior Classes were the first to go. I did not then know, as I have realised well enough since, what it must have been for him to spare time to talk to first-year students about the laws of motion, levers, and specific gravity. He took us in this work as though he had nothing else to do and as though he had no object in life but to make things clear to the dullest member of the class.

At Sheffield, and in the early days at Cardiff, the tenets of the Fabian Society, then in its youth and somewhat conspicuous, were often a subject of discussion among a section of Viriamu Jones' friends. He was in sympathy with the aim of their propaganda, and often pointed out, then and later, in reply to arguments against, and fears of, 'socialistic doctrine,' the growing and inevitable tendency of English legislation to promote the good and protect the interests of the whole community rather than the interests of one class or section.

Viriamu Jones was, politically, a Liberal; but in respect of party he expressed the view that 'for representative government the ties of party must not be regarded as very binding.' As a civil servant he considered himself debarred from giving public expression to his views, and rarely talked of political questions except in the family circle. In 1886, when Mr. Gladstone's proposed Home Rule policy for Ireland split the Liberal party, convinced of the wisdom and justice of such a measure, he was for a time very anxious to enter into political life.

He often spoke of its advantages, writes Mrs. Champion Russell, the absorbing interest of the work, the opportunity it brought of knowing—and of taking a place among the makers of—history. He must have known himself gifted with unusual eloquence and powers as an administrator, but at the back of his mind I feel sure that science and the spread of knowledge in his beloved South Wales were held a high and sufficient aim.

In Cardiff he set before his fellow-citizens a high ideal of

civic life and strove to bring 'town and gown' together so that they might co-operate for their mutual good. At one of the Mayoral dinners he said :

I wish to recognise in warmest terms the kind feeling which placed the College by name on the toast list this evening. It is true that the University College is a national institution founded to benefit the whole of South Wales and Monmouthshire. But it is peculiarly also a Cardiff institution, capable of benefiting Cardiff in a more direct and complete manner than any other part of the Principality, since :

1. The teaching is brought to the doors of the students' parents.
2. The evening work is accessible to Cardiff citizens.
3. Many scholarships are awarded to Cardiff boys and girls.

I know that these special advantages which Cardiff may derive from the placing of the College here have been appreciated by the town. The town offered much to bring it here—and I am glad to take this opportunity of recognising the loyal and honourable manner in which it is making effort to redeem the pledges which it gave, and I am glad to think from the reception you give to the toast that, now it is here, your good feeling to it is unchanged. On such an occasion it is perhaps legitimate to forecast the future.

I see a noble building situated perhaps a little away from the roar of traffic and the shriek of engine whistles—on the borders, let us say, of an extensive public park. I see new faculties of medicine and engineering added by energetic persistency in making our reasonable petition to Her Majesty's Government, assisted by the munificence of private donors—I see an increasing number of students from Cardiff and South Wales taking advantage of the opportunities of higher education provided ; and I see also continually increasing cordiality of sentiment and intimacy of relation between the College and the town in which it has been placed.

All this is not a mere dream. It may be readily realised if we all wish it. If this town will only feel that it must be done, so great is the power of combined and ordered human will that difficulties will vanish as smoke before Heaven's breezes. We have known and felt before that the good wishes of the town were with us ; but, nevertheless, the kindly expression of them on the part of this great and representative assembly helps me and will help my colleagues (and schools of the town) to put forth bravest efforts to make the College a real living power for good in this great town of Cardiff.

And on a similar occasion :

We now begin upon all sorts of talk. ' Body has got its sop and holds its noise, and leaves soul free a little.' And, as I rise, the first thing that occurs to me as fitting to be said is what excellent, joyous occasions these annual dinners of the Mayor of Cardiff are. We meet here at your hospitable board, fellow-citizens in glad good-fellowship, and for my part I feel that in the shake of the hand I give and receive there is on these evenings an added warmth remembered for many a day after. But the occasion is not without its solemnity, too, as is usually the case with glad occasions. We are beginning a new municipal year, are turning to a new page of the history of the town to which we are proud to belong—a town remarkable alike for its rapid development and for the public spirit and energy with which its people endeavour to meet and adequately grapple with the many new conditions that must necessarily present themselves in a community so progressive.

And at such a time it is fitting that we should make grateful acknowledgment to those members of the community to whom we are specially indebted for its prosperity and progress. That I take to be the meaning of the toast list.

And if this be so, I feel, and you will feel, that the toast which has been entrusted to me is one of the most important, if not the most important, that can be found on any list. I feel that there are many who could propose this toast in words more adequate than I shall find, but I venture to claim that there are none who could desire more than I to make heartfelt recognition of our deep indebtedness to those men who are the subjects of this toast : the Ministers of Religion.

I might say these words include men of very various opinions and beliefs—I prefer to say that there is a deep common characteristic of all.

Amid the small cares of life, they continually remind us of higher things. They carry our thoughts from our very finite aims to a great eternal purpose. They devote their lives to bringing home to us the conviction that not only is the good real, but that there is nothing in the highest sense real but the good.

In this world of strife, competition and unrest, they remind us that there is a peace which passeth understanding, the everlasting peace of the soul brought into harmony with the eternal laws of God.

Faithful servants of God—zealous ministers to the spiritual needs of men.

His unwearied efforts to secure the best civic opportunities were recognised when, after his death, the Cardiff Corpora-



tion recorded its 'admiration of his great zeal for the moral and intellectual advancement of his fellow-men and his high attainments as a scholar.'

They also 'recalled with pride' the last occasion on which he appeared before the Council 'and by his brilliant advocacy secured for the University College a free site in the Cathays Park.' They expressed their gratitude 'for the many important services rendered by him to the Town of Cardiff as a citizen thereof . . . and his wonderful administrative gifts so unselfishly devoted to the University College of South Wales and Monmouthshire in the cause of Welsh higher education.'

The Christmas of 1885-6 Viriamu spent with Mr. and Mrs. Yeo and their family at Cheltenham. 'Treasure Island' had just been published, and Viriamu brought it with him to the delight of young and old: he revelled in 'Fifteen men on the dead man's chest' and the blood-curdling mystery of John Silver, till every member of the party caught his humour. This and the 'New Arabian Nights' were his favourites among Stevenson's romances; and he often read aloud at that time the 'Rajah's Diamond,' enjoying its quaint and clever turns of phrase and dialogue. He compared it to the Old Testament for its simplicity of style and spoke of the tale in these terms one day to two old ladies of stately traditions, who on their next visit confessed that they had been scandalised by the stories and puzzled at the divergence of their views from those of the 'Admirable Crichton,' as they used affectionately to call him.

He delighted in Stevenson's 'Essays,' especially some of those in 'Virginibus Puerisque' and 'Memories and Portraits.'

He enjoyed Disraeli's novels—'Lothair' especially; the dry humour of St. Aldegonde and his dependence on his wife for setting right any offence given by his own tactless or offensive remarks, particularly appealed to him, as did the insight and irony of 'Sybil,' when the author deals with the suddenly developed plutocracy of the coal and iron industries. George Meredith's novels

he read and re-read; he shared Meredith's faith that in 'wooing wisdom' Beauty gives loyal guarantee that 'in her a soul is risen,' and, that, her soul risen—spiritually alive—a finer happiness must be assured not only to woman but also to man, her comrade, friend, and mate. Novels are good company in the train, and at one time Viriamu Jones hardly missed a new one. But the books he bought, hoping always that a leisure time would come, were such as Symonds' 'History of the Italian Renaissance,' Lecky's 'Histories,' Landor's 'Conversations,' Gibbon, and works on philosophy.

The French language gave him peculiar pleasure; and there were several years when he turned to the 'crowded and sunny field of life' of Dumas' romances and forgot administrative cares in the daring deeds, wit, and gaiety of the immortal musketeers.

'I am afraid I do not appreciate in poetry much that other people delight in,' he wrote from Oxford. 'I find I read very little.' But at that period of his life—he was twenty-four—he read parts of 'Sigurd the Volsung' again and again, the 'Staff and Scrip,' and some of Shakespeare's plays. He went to see 'Hamlet' played whenever he could, and used to say that of all interpretations he had seen, Irving's was in his opinion by far the most thoughtful and illuminating. His friend, Mr. P. A. Barnett, says:

We then talked about everything, and about psychology and poetry particularly. He had an extraordinary memory for verse, but he dwelt most on what I must be allowed to call the philosophical side of poetry. There lives very vividly in my mind one occasion in my rooms after Hall when Viriamu Jones and some others (including the present Chancellor of the University of Oxford) discussed at great length that sombre poem 'The City of Dreadful Night,' recently published by James Thomson. Jones and I maintained its greatness against the assembled world. But I lost that particular copy that night, and ever after sought for it in vain!

In the early years at Cardiff he and his friends used to read poetry aloud. When 'The Sensitive Plant' was chosen, no one was more interested than he in trying to fathom the meaning of the lines:—

Received more than all, it loved more than ever  
Where none wanted but it, could belong to the giver—

which puzzled several members of the party and remained a puzzle though analysed and discussed on staff walks for some weeks. As a young man he was a constant student of Browning, and when his life grew too busy to join in readings with friends, he still read aloud often to guests; and more than once the large and flourishing Browning Society which grew up in Cardiff asked him to join them and read a principal part. Many passages he knew by heart after a single reading: he was attracted by the subtle mind and the comprehensive sympathy of the poet; and his reverent treatment of the great, human passions, his searching into life's problems, his triumphant answer to doubt and discouragement—all suited Viriamu's own ardent and religious temperament.

In 'By a Fireside' he found hopes glad and confident as his own, and 'One Word More,' suggested his own experience in its contrast between the attitude to the world of the man who gives it his creative work—

Oh, the crowd must have emphatic warrant . . .  
Never dares the man put off the prophet—

and his attitude to the woman whose sympathetic insight perceives in him all that the world is apt to miss 'in making up the man's account.'

He would quote Bishop Blougram's words, and point to the effect of the choice or rejection of faith on a man's work and character:

Belief or unbelief  
Bears upon life, determines its whole course,  
Begins at its beginning.

He felt, too, an immense pity for those who had no devotion to impersonal ends, and here again Browning uttered his own conviction:

Enthusiasm's the best thing, I repeat:  
Only, we can't command it; fire and life  
Are all, dead matter's nothing, we agree:  
And be it a mad dream, or God's very breath,

The fact's the same,—belief's fire, once in us,  
 Makes of all else mere stuff to show itself :  
 We penetrate our life with such a glow  
 As fire lends wood and iron—this turns steel,  
 That burns to ash—all's one, fire proves its power  
 For good or ill, since men call flare success.

He was greatly attracted by Swinburne's poems on the North Sea ; and those on children he thought beautiful, for he loved children and they always claimed him as a comrade. Some of William Watson's poems, too, he read with great appreciation. If asked to read aloud, he generally chose either Matthew Arnold's ' Tristram and Iseult,' ' Rugby Chapel,' ' Sohrab and Rustum,' or one of Browning's shorter poems, as well as ' Pompilia ' and ' Caponsacchi.'

But all his life Browning, in whose poems he found inspiration and renewal of faith, was his chosen companion among writers and poets ; and when he travelled the two volumes of ' Selections ' were always in his hand-bag.

Except when he could go to the College Chamber Concerts, he had little time or opportunity of hearing classical music. His ear and voice were true, and he often enjoyed singing himself. He wrote in July 1881 :

At present I am like a nightingale, uncultivated, yet producing sweet sounds. Was there anyone [he added] who did not like the sound of his own voice ?

Whether as listener or singer, he loved above all the songs of Schubert and Schumann, and returned again and again to the old English ballads, ' Begone, dull care,' ' Love will find out the way ' and others.

In art, it was perhaps the intention or expressed idea, the impression produced by a picture, that interested him rather than the medium in which the painter worked. But he appreciated etchings—reproductions of the pictures of Velasquez, Titian, and Meissonier, and some of Haig's work in architectural drawing—and would have these on the walls of the rooms in which he lived and worked.

No one enjoyed the society of his friends more than Viriamu Jones ; he was interested in individuals and their



opinions, and always found enjoyment even in the social 'functions' that are often voted boring. His friend, Professor Haycraft, says :

He was great in conversation as he was in all else, and in this too he showed himself the born leader. One remembers how he would guide the flow of talk into the desired channel, and what a masterly part he himself would play in it. We ignorant people who were allowed to do so much of the talking would often afterwards realize that we had stated our case before a far-sighted and clear-seeing judge who did the summing up.

He was one of the most fascinating of talkers, said Sir Harry Reichel, who after listening to his silvery tones and felicitous phrases, recalled Pitt's remarks to the Frenchman who could not understand Fox's influence : ' You have never been under the wand of the enchanter.'

Of a man's inner life none but himself may speak : Viriamu Jones' religion was manifest in his life of creative action, and rarely, if ever, was it expressed in speech.

In his later years, if he left his work for half an hour in the evening to read aloud to the intimate circle, he generally chose the 15th, 16th, and 17th chapters of St. John's Gospel, and very often the 15-17 verses of the 21st chapter. Their spirit entered into his heart and soul, and he would say of his experience that, if a man puts himself in line with the Divine current, his work is accomplished without effort.

In 1901 his cousin Morlais Jones wrote :

Three years ago I spent an evening with him at the Savile Club. We had a long talk ; and at one point the talk became grave and serious, and we frankly opened to one another our deepest thoughts and discussed subjects we had never touched upon before. I understood for the first time how near he lived to God, and what a noble conception of duty he had.

As Principal, Viriamu Jones wished to keep in close touch with his students in their private life as well as in their College work. It was much more than a kindly interest ; it was an identification with their aspirations as well as their achievements, and from their talk, it seemed they were (as one observer happily put it) ' really *knit* to him.'

Of their affection and devotion to him, 'to us, the ideal of a perfect gentleman,' the following letters, chosen from among many, are a touching witness :

The first time I met the Principal, I was in a frame of mind that was not commendable. I had been greatly disappointed. Nothing was of any use except to get what enjoyment one could—there was nothing worth bothering about. My interview with the Principal changed all that. Somehow or other I felt that I was breathing highland air ; I was in an atmosphere of high ideals ; he seemed as it were to diagnose my 'disease,' and preached to me a gospel of hope and of service. I came out feeling ashamed of the spirit in which I went in. . . .

I do not know what the Principal thought of his first batch of students. I am afraid some of them were raw material enough, if I and one or two others whom I knew intimately were fair samples. But the Principal never gave us to understand as much. Indeed, if I am not mistaken, I believe he regarded us, the Pilgrim Fathers, with more than usual affection. We were mostly raw material, the great bulk of us not within measurable distance even of the London Matric. What must he have thought of us, he who had had such a brilliant University career ? One of the first things we heard about him was that he had topped the Honours list of the London Matric. when he was only just turned sixteen. But here were we, pegging slowly away at that self-same examination, and some of us almost out of our teens.

I can easily recall my first interview with him, in the little room on the right of the entrance of what is now known as the Old College Buildings. Bidding me sit down, he inquired, in kindly tones, what I intended doing, what course I meant to follow, and what subjects I wished to take. And bluntly enough, I told him I wanted to study philosophy. Of course, I was a long way off even the fringe of things philosophical, and he knew it. But not a smile on his part betrayed the humour of the situation. He asked me what I had read in 'philosophy.' I had read something about Bacon and Cousin and Emerson and Carlyle. What an incongruous, ill-digested jumble ! But the Principal quietly suggested that I might drop these for the present and concentrate on English, Latin, French and other subjects required for Matric. I could not but agree, and to do myself justice, I think that, after retiring, I blushed for the figure I had cut. In any case, I know I have blushed many times since.

I never was before him for disciplinary purposes, but I know that it was the ordeal most dreaded by the slackers. It was

more in sorrow than in wrath that he rebuked them, and I never heard any one complain that he had been unjust. But they seldom went before him a second time.

There was nothing more potent than the Principal's smile. It was like the warm rays of the sun after an April shower, everything expanded and grew under it. I have been told since that the Principal's opponents in debate never dreaded anything more than that self-same smile, for, like the flood of melting snow, it carried everything resistlessly before it. His soft, penetrating stare would have burnt a hole through any heedless youth silly enough to venture upon antics in his presence.

We always felt at home with the Principal, for with him it was useless pretending to be other than what we were. He knew everything, knew without being told. This quick, sympathetic insight, was eminently characteristic of him. It let him into the heart of things, so that sometimes, indeed, his knowledge was a bit uncanny.<sup>1</sup>

Another student wrote :

The Professor's physiognomy was most striking, with eyes so full of earnestness and sympathy, that he never failed to draw out what was best in everyone coming in contact with him, so great was his personal magnetism and his charm of manner.

Mr. T. W. Phillips, H.M.I., says :

My first contact with him was when I was interviewed by him in his private room at the College just before I was enrolled as a student. He, of course, catechised me as to what I had done ; and it was when, in a sort of boyish pride, that I told him I had done 'the whole of Euclid' that he gave me the smile which has remained with me ever since. I felt at once that I had said a stupid thing, that I had given way to a quite unnecessary boasting, and that I had a wrong estimate of things ; but at the same time I felt that he knew all about it, and that he would be the last man to judge me harshly for such a slip. But I could never again bring myself to tell him—or indeed anyone else—that I had done 'the whole' of anything. It was a most admirable corrective to receive at the threshold of one's College career. Such a corrective might, however, have been given with a different result, for everything depended upon the spirit in which it was done. It was the peculiar kindness that was in his smile that saved the situation. Unfortunately, his opportunities for coming into personal contact [as teacher] with the students became fewer and fewer each year. The

<sup>1</sup> W. Lewis, M.A., Head Master of the Intermediate School for Boys, Llanelly.

students did not know the reason why, for they had no conception of the enormous amount of work that fell to the Principal's lot. The only thing we did know was that we did not see as much of the Principal as we thought we had a right to—and so we had a grievance! Students always have.

It is curious how small things seem to tell in looking back over one's experience. I remember quite distinctly how a chance remark of the Principal's gave me the first real indication I had of the fulness of his life. It was at one of the social gatherings in the library where we always had a chance of meeting him. Of course he gave us a short address—for I do not think any such gathering would have been complete without something of the sort from him. We came to look upon it as our right to expect something from him, and luckily, as far as I remember, we were never disappointed. Upon the occasion I have in mind he remarked in the course of his address, 'The other day I read a book.' We all cried out hear! hear! in good-humoured fun; and then he told us very seriously that—though we little knew it—the demands upon his time were such that he hardly ever had an opportunity to read a book. This was strange hearing from the head of a body of men and a band of students whose main purpose in life was to read books. From that time I began to realise that his life meant something more than class teaching and talking to students.

Professor George Unwin, who was at the College in later years, writes :

I find it even harder than I expected to give any adequate expression to my memories of your husband.

It is nearly twenty-five years since I first met him and over twenty years since I saw him last, and the occasions of intercourse were few; so that it is remarkable that I should have so vivid and enduring an impression as actually remains with me. On reflection I realise—and this after all is the greatest testimony to your husband's real power—that my impression of his personality is mainly indirect—that it was derived largely from the minds of my contemporaries at Cardiff, both students and teachers.

Their unanimous and unswerving belief in his character, ability and aims was so closely in accord with my restricted personal knowledge and my instinctive judgment that I seemed on a first retrospect of that time to have had a greater degree of contact with his personality than was actually the case. No one doubted for a moment that our Principal was a strong, far-sighted and disinterested man, uniquely endowed for the work he had taken in hand.



Of more intimate intercourse with him I only clearly remember two moments—the first and almost the last of our acquaintance. I recall vividly the radiant friendliness of his reception of me, as a scholar, in 1890, his encouraging knowledge of the strong points in my papers and the atmosphere of manly equality so exhilarating to the young and shy, which insensibly invested our talk and made it memorable.

At our last interview in 1893, we seemed like old friends of rather different ages discussing the one's future in the light of the other's experience. If I remember rightly, we talked also of T. H. Green, whom he had known and whose writings had become my chief inspiration during my stay at Cardiff. To share the intimate allegiance of mind with the Principal was an unexpected joy, but added also to the regret of parting.

Fleeting glimpses of intermediate memories come to me—of talks in your home when sometimes his frank and cordial difference of opinion seemed more friendly, as it was certainly more helpful, than agreement.

But these personal notes cannot but seem an unworthy offering to the memory of one who spent his life ungrudgingly and almost recklessly in the noblest field of public action.

A few recollections by Mr. B. J. Evans, for many years Senior Clerk at the College and a most devoted worker in the office, are here added :

'Here comes the Principal' was an expression frequently heard in the College hall while the students were scanning the notices on the notice-boards. As he entered the hall, hurriedly perhaps taking off his cloak, he would give a kindly glance in the direction of the students and pass to his room. That glance, though kindly given, was unmistakable. It was piercing, and the impression it left was enduring. His fascinating smile I shall never forget. It illuminated his face with a distinct brilliance and stimulated me to no small extent in my work as a plodding Clerk. 'Who is that gentleman going upstairs in academic dress?' was a question put to me sometimes by persons unacquainted with the members of the College staff, and who came to the College to make inquiries or perhaps to consult the London University pass lists on the notice-boards in the College hall. I would reply 'He is the Principal of the College.' 'Dear me,' they would say; 'Isn't he young? Is he Principal Viriamu Jones?' I would say 'Yes; he is also Professor of Physics in the College, and before coming to Cardiff was Principal of Firth College, Sheffield.' 'Dear me, it is wonderful!' was their response.

The charge of the temporary buildings was not without its anxious moments.

When the Earl of Rosebery, accompanied by the Principal and other authorities of the College, entered the Theatre, it was found that the building was crowded to such an extent that even the sills of the lower windows were blocked with students, several panes of glass had been broken, and the frames of the windows were to some extent damaged. The Principal, seeing the building so densely packed, was profoundly perturbed when reminded by Miles of the great weight upon it and the possibility of the building collapsing. He immediately gave instructions to summon all the helpers he could with the view of easing as far as possible the crush in the passages and staircases. After a time they were able to do this, with the result that the pressure inside the hall was considerably diminished, and the building withstood the weight and strain. No accident occurred, but if the Principal had not acted as promptly as he did the building might have collapsed with fearful results.

Eight years after Viriamu Jones came to Cardiff, at the opening of the Session in the autumn of 1891, attacks of agonising pain such as he had suffered from continuously for six months after his appointment and afterwards from time to time, became persistent and more acute. He also did not sleep. A holiday on the Continent was prescribed, out of reach of all correspondence. In November he went by sea to Naples, where his wife joined him. In Naples his unbounded interest in volcanoes and their effects at Pompeii, Herculaneum, Baiae, and eager delight in the Naples Museum and Aquarium, busied his leisure from morning till night, so that the condition of over-strain, of which pain and the insomnia were the inevitable symptoms, was little modified. The incentive of new scenes and new acquaintances, of fresh worlds of nature, history and art was inimical to repose; and the winter climate of Italy was trying, so they went on to Cairo to seek sunshine and conditions more favourable to rest.

Once Cairo and its sights were left behind, Viriamu Jones, going slowly up the Nile in an old and somewhat inefficient French steamer, gratefully enjoyed the sunshine and the marvellous climate, and proceeded to study (as far as time

and guide books allowed) the history of Egyptian dynasties as revealed on the walls of her temples, and the philosophy of the Egyptian priests. There was indeed new delight for mind and eye every day: a world of brilliant sunshine, magnificent sunrise and sunset skies, golden deserts and palm trees, and the mystery and majesty of ancient monuments and temples. The enchantment of the climate lay over all, and no traveller ever enjoyed donkey-rides, dragomans' stories, and the comradeship of friends more completely. Mr. H. Woolcott Thompson, a friend and neighbour of many years who travelled with them, writes:

What seemed to be brought vividly to my mind in connection with the time in Italy and Egypt when I lived in the greatest intimacy with him and you, was Vir's faculty of throwing himself whole-heartedly into whatever was interesting his companions for the time quite apart from his own special concerns. I suppose there never was a College Head who had so little of the typical 'Don' about him—at least when he could get his nose from the grindstone; and this wideness of view and adaptability was probably one reason why he was such a charming companion. Do you remember how he used to draw out Ibrahim our Dragoman on the Nile, and make him tell us over our after-dinner coffee the most marvellous and Arabian Nights-like tales of Mahomet Ali and Zebehr Pasha and Egyptian folk stories, and how devoted Ibrahim was to him, so that he always gave us good donkeys and the uppermost seats at the mid-day feasts, and took care that we at any rate saw all there was to be seen in the Temples and Tombs?

Poulton, in his book, mentions Vir's wonderful skill in getting what he wanted for the great educational schemes which he had at heart by the exercise of a gentle diplomacy; and I shall always remember his persuading me to go to Egypt with you as an instance in a small way of this gift of his—for before the event I would have wagered long odds that no one *could* persuade me to undertake such a voyage. This instance, too, illustrates how his arts were exercised in the true interests of his—victims shall I say? for I have never ceased to be grateful to him that he *did* persuade me.

I recall, too, very pleasantly the time I saw him (and you) when you were staying near Geneva in the summer of 1900 and there seemed to be good hope of Vir's recovery. My cousin and I were on our way home from the Italian Lakes, and took that route specially to see Vir. We had, you may remember, a morning together at Ferney, and again Vir's diplomacy was

displayed in gaining for the party entrance to the Château on a day when it was not open to the public.

In less than three months—hardly the nominal period of a long vacation—he was at his post again, the centre of the swift procession of meetings of Council, Senate, house committees, conferences, and public evening meetings. These steadily increased in number: also the travelling which they involved. Fresh legislation brought the need of further organisation for the Intermediate schools; the University was drawing to the end of its first chapter, the granting of a Royal Charter, and about to begin the second and more arduous one. Each summer holiday grew shorter, and the need of some powerful counterbalancing interest more imperative; hours not devoted to organisation work were therefore spent in the laboratory.

In January 1893, Viriamu Jones entered Gray's Inn, as a student, with the intention of preparing to be called to the Bar as a qualification for some post in a public department; such a post would ensure the comparative leisure which he felt he must seek as soon as the work he had undertaken was accomplished. He read, or began to read, one or two books on the law; the examinations would have troubled him little; through his friendship with Sir Alfred Wills and frequent association with his brother, Sir David Brynmôr Jones, he had acquired insight into the subject which had always possessed a certain attraction for him. But appeals for funds and instituting new departments for the College, the organisation of the University of Wales with the consequent incessant travelling and increasing number of meetings, all prevented much advance in the study of the law.

Before he went to Cairo, some notice of his scientific work brought the following letter:

20, Maison Sioufi Pasha, Cairo, Egypt. *September 8, 1890.*

MY DEAR VIRIAMU JONES,—Do you remember a chap called D. A. Cameron? When we were rosy infants at Oakley House in '66 and sat side by side below the great Martin and Macleod, and had *no* marks in a subject, we used both to put up our desks: I said 'None, Sir,' and you said 'Not any.' You have been all



sorts of things since then. From the papers I see you are going to read a Paper at the Brit. Ass. on the 'Ohm,' and that Bagnall Poulton is going to read another on 'Mimicry.'

You may meet two friends of mine, Sir C. W. Wilson of Khartoum fame and Major C. M. MacDonald from the Niger. The latter is a pal of mine, the former a revered senior and chief in Asia Minor and Egypt, &c. &c.

Can you imagine your old school-fellow, 1st as Consul, and then as Cadi, with red tarboosh and long black coat sitting as Judge in Criminal Appeal—listening to Arab lawyers jawing all day, or holding inquiries in Arabic as a juge d'instruction?

If this letter conveys any pleasant reminiscences to your mind flash an Ohmic message to Mrs. Watson at Summerlea Cottage, Caversham Hill, near Reading; she likes letters from old boys. . . .

We are expecting Cholera. I saw quite enough of it in 1889 and don't want to see any more. Mecca is a pest house where the seeds or bacilli grow plump and vigorous annually. I know Jeddah in pilgrim season time, and travelling in a pilgrim steamer in the Red Sea at 6 knots an hour is a torture that has been spared you.

I see from Whitaker's that you are Principal of Cardiff College and teach Physics. What is that?

Yours very sincerely,

DONALD A. CAMERON.

In May 1894, Viriamu Jones was made a Fellow of the Royal Society. His pleasure at the recognition of his work was great, but on reading the letter conveying the news his first words were: 'It is not so much for myself, though I am very glad, as you know, but it will make such a difference to the status of the College and to what people think of it.'

His brother Leif wrote:

May 13, 1894.

I rejoice to hear from Morlais that you have been made F.R.S. It says not a little for that abstraction of mind that makes the scientific genius, that you should have found time in the midst of your educational and university-creating duties in Wales to do work at science which has earned for you this great honour.

I congratulate you upon it with all my heart, and I hope that science may always claim some portion of your allegiance, though young Wales hangs on your skirts, and jurisprudence stands beckoning you into her dazzling circle.

And two students expressed their appreciation :

June 19th, 1894.

We desire to convey to you our most sincere congratulations on your being elected a Fellow of the Royal Society. As Welshmen we rejoice in the success of a countryman, and as students of the Cardiff University College we rejoice still more in the success of our Principal.

Long life to carry on similar researches and to steer the Cardiff College along paths which will make it second to none, are the sincere wishes of

T. AND J. R. MORGAN.

To most of Viriamu Jones's friends, his paper, published in 1891, on 'The Determination of the Ohm,' was too profoundly scientific to be readily intelligible, as they frankly told him. Lord Aberdare wrote :

MY DEAR PRINCIPAL,—Many thanks for your Philosophical Paper. It conveys an undeserved compliment to my intellect and makes me shudder at my ignorance. I take refuge in Cowper's lines :

'Knowledge (that's you) is proud that he has learn'd so much,

Wisdom (that's me) is humble that he knows no more.'

Ever sincerely yours,

ABERDARE.

Dr. Isambard Owen was even more frank in his confession of ignorance :

Many thanks for the appalling work which you have kindly sent me. I felt as if I were going to school again when I looked into it. I congratulate you heartily on completing what I can see is a very great piece of work.

Miss Caroline Williams sent appreciation :—

Many thanks to the eminent ' Author ' for his paper Published by the Royal Society on my old friend the ' Ohm.' I have read it with ignorant but sincere admiration.

In the autumn the Dean of the Medical School, Professor Haycraft, arranged a dinner to the Principal in

Cardiff. One of those invited to be present was Archdeacon Griffiths. He wrote :

October 26th, 1894.

MY DEAR SIR,—It is to me a great disappointment not to be able to join you and others in doing honour to the man who deserves every possible honour being conferred on him. . . . The eyes of the Welsh nation are fixed on Principal Jones ; its heart beats with loving sympathy and with earnest hopes of still greater achievements being accomplished by him in the many important spheres that he occupies.

Believe me,

Yours sincerely,

JOHN GRIFFITHS.

A few of Viriamu Jones's letters are here printed, as brief records of his work and journeys, and for what they express of his attitude towards life.

He was not a letter-writer in the widest sense, and the letters selected are often short, hurried notes to his wife when he was holiday-making or attending business meetings in London or elsewhere ; they do, however, reveal his disposition and temperament and his constant interest and absorption in the work in hand.

*Jan. 29, 1886.*—c/o F. A. Yeo, Esq., M.P., 32 Onslow Gardens, Kensington, W.—Your letter of 26 received a welcome this morning. The homily is really not addressed to a sinner this time. I have been taking care of myself and am very well. We went to hear Archdeacon Farrar at Westminster yesterday morning—the sermon had for its text the story of Dr. Jekyll and Mr. Hyde : though nominally there was a verse from St. Paul. It was ornamented with several Latin quotations which the Archdeacon carefully translated—this was very wrong—for one language ought to be enough. Latin, if the audience will understand ; English translation if they will not.

Afterwards I lunched with Isambard Owen at the Savile Club. I go to-night with Mr. Yeo to the House of Commons. Chamberlain & Trevelyan have resigned—perhaps they will be saying a word or two of explanation.

*October 8, 1886.* Cardiff.—My day's history—breakfast at 9 followed by Holden [the tailor]—when shall I see less of him ? College at 9.45 : admitting students and listening to long-winded utterances : visit from Miss Bruce with two girls from Ashford School who are at the Hall & needed enrolling on our books. Back here at 1.30 : College 2.30 : walk

on Penylan from 5.45 to 6.45. Dinner after an interview with Mr. E. Waite who made me promise to take the chair at a lecture of the Young Men's Association at the Chapel in November. College again at 7.30 to meet the Practical Class. Lecture till 9. Senate Committee Meeting till 10.30. My practical class is full. I cannot deal with more than nine.

Our entry is so far less than last year. It looks like a falling-off of some twenty in our numbers. Undoubtedly the other places present greater attractions for English students. For instance, of the thirteen girls at the Hall at Bangor, twelve are Miss Buss's and one is from Macclesfield. Not a Welsh girl among them.

It is lovely weather here. If it is as fine with you, you must feel very near heaven. As I walked at Penylan in the twilight there rose a lovely moon in the blue sky. It is there still and probably you have been looking at it as I did.

I wrote to Edie about Ker's lecture so I need not expand on it again. Tell her that I grieve to be no longer eating the good meals that she cooked. How nice of her to object to my kind regards—I wonder if I may send my love: I will presume and do so.

Oct. 10, 1886. Cardiff.—I was very glad to receive your letter yesterday—a message from a great distance I feel when I think of the necessary ten days that separate us; and the more than that unnecessary but expedient or at any rate arranged. What says Shelley whom I have been glancing at this morning?

‘To Mary—

O Mary dear, that you were here  
With your brown eyes bright and clear,  
And your sweet voice like a bird  
Singing love to its lorn mate,  
In the very bower disconsolate;  
Voice the sweetest ever heard!  
And your brow more—’

And the poem is unfinished. Perhaps she came in the middle, so destroying the motive.

The servants are behaving well: we<sup>1</sup> are being treated admirably. Food abundant and well cooked.

We are going out to dinner at the Elms. I am going to buy ‘Ecce Homo.’ I was very much impressed by what I read of it.

July 28, 1892.—The change of air has done its work. I am very much better. I don't know what to say to the invitation. They are very keen on going to the chalet, and I am very keen on completing the Standard  $\frac{1}{2000}$  Ohm which is much needed by practical men.

<sup>1</sup> His brother Morlais shared his home for two years.



*Oct. 1st, 1892.*—I am weary after a long day of Meetings and wish you were here with me.

*Oct. 21st.*—It has been a day of Meetings; to-night Vaughan, Little<sup>1</sup> and C. Thompson dine with me. I shall be glad of their society. On Wednesday I go to Shrewsbury and shall have to return here to see the T.I.C.'s (Technical Instruction Committee) report.

*Oct. 19th, 1892.*—The President [Lord Bute] is responsible for my silence. I have been seeing him pretty nearly every afternoon. I went to-day to meet him at five o'clock and we began reading Owen's draft University charter.

*Nov. 26th, 1892.* London.—There is a regular commotion at the Department as a result of my visit, and I am to go there again to-morrow.

*December 18th, 1892.* Abbeville.—I left London at 11 o'clock. It looked good for leaving. The dulllest of grey days, not a foggy one, and the grey stretches far. It is nearly the same here. But the sun showed itself for a moment at Dover and a moment at Calais. The sea has its green hungry look with a crawling foam on the wave crests. I saw Lady Carlisle yesterday. She seemed to me ill, but her interests are as keen as ever.

Brynmôr had a great success before the Privy Council (about 12 judges) on Wednesday and Thursday—a personal success, for he thinks he will lose his case. Lord Esher said, 'We all think you are doing the case as well as it could be done.' The Lord Chancellor then said, 'Their Lordships desire me to thank you for your able (or "learned") argument.' It was an interesting case between the Chief Justice of the Bahamas and the Governor of that Colony. Brynmôr represented the Chief Justice.

It was good to have your letter last night. You do not say how you are, in it. I am glad Annie and her boy continue well. Pray give her my love. 6 p.m. I have met no one whom I know to-day, and I have a compartment to myself at present. I am going on from Paris in a sleeping car = luxury. The train south starts from the Nord Station; and there is a sufficient interval for dinner. I keep wishing all the time you were with me, as in the journey last year. You see you keep my heart, and a man and his heart should not be very far away from one another. Without a hat he can journey well enough (do you remember mine being blown away?), but not without his heart.

I think I shall stop the night at Monte Carlo, and see what the people describe as Paradise. 'Where is the serpent?' I will visit the Casino.

I have been reading 'Tess,' but I do not like it. Also

<sup>1</sup> A. J. Little, Professor of History, at Cardiff.

'A Human Document,' by W. H. Mallock. This latter is a study of marriage and whether people are ever justified in living without it.

*December 20th, 1892.* Paris Lyons Mediterranean Railway, near Bordighera.—It is very convenient not to have to drive across Paris. After dinner I found myself in a four compartment of the sleeping-car with three pleasant Englishmen. After they had talked a bit (being acquaintances) I found that one of them was Judge Chalmers of Birmingham County Court, a great friend of Brynmôr's, so I introduced myself—and we all became good friends, and had a delightful journey. In the morning we awaked a little before Avignon. There was frost white on the ground but a clear sky. Paris the previous evening was in a fog. Frost disappeared as we drew near Marseilles, and at Marseilles summer began. And summer sunshine and warmth reigns all along the Riviera as far as I have come. Chalmers and Austin (an excellent, happy person who takes life gaily, and a devout Roman Catholic) were going to stay at Monte Carlo, so I joined their party. Austin knows Monte Carlo well and was an excellent cicerone. We went to the Grand Hotel, and after dinner he took us to the Casino and we saw the gamblers. It is not a very pleasant spectacle.

Monte Carlo is a most lovely spot. We walked round the Monaco Gardens this afternoon. The place has palms everywhere. I was very glad to see them, they reminded me of the land of lands. I left at 4.30, and have just got through the Italian Custom House without being asked to pay on two ounces of English tobacco I produced for their inspection.

Alassio.—The villa is right on the sea—the garden runs down to the beach. It is full of palms and oranges. You pick tangerines off the trees and eat them.

*December 21st, 1892.*—Have been a most delightful walk. The rain is completely gone, and the sun has been shining in a blue sky. We started for Santa Croce. Having arrived there M. and I separated from the rest of the party, and ascended the ridge to a peak—I dare say 1500 ft. Over it blew the north wind which felt cold, an indication of fine weather I believe. On the east of us was the Bay of Albenga with its Island of Gallinaria (so called because Noah landed there from the ark the cock and hen), on the west the Bay of Alassio, to the north the beautiful sky line of mountains tipped with snow. It is certainly a most beautiful country. I read yesterday an amusing and instructive story by Henry James, written in his best way, 'The Lesson of the Master.'

*December 24th, 1892.* Villa Emilia, Alassio.—Just time for a line before post. We had a good drive yesterday afternoon to Albenga along the coast, and then up to a little village on the mountain side through olive groves. It was sunshiny but not

very warm. To-day is warm but not very sunshiny, and the sea is calm and has an oily look.

Mr. William Rathbone is interesting. He told me Gladstone once offered him high office. He declined because, he said, he was too old to learn a new profession. He said yesterday that in his experience men might be divided into two classes—those who have ideas and work at them, and those who get the credit of achievement; and further that if one wants power, one must be careless of the reputation for it: a man careful of his own credit seldom achieves great influence. He said that the only office he would not have refused was that of Gladstone's private secretary. He has a right to say all this for he seems to have worked hard with the help of the most competent men (lawyers and others whom he has paid for the purpose) at political questions and to have been content to place unostentatiously the result of his labours in the hands of successive ministers. For instance he tells me that at present he is through an agent (an able lawyer, Mr. Fanshawe) collecting evidence as to the working of the very varied licensing laws of the American States.

I am now summoned for a walk.

*August 22nd, 1893.* Maidenhead. — There have been no events here. But quiet placid sunshine and rain have alternated for three days on this lofty common. I am better for my holiday. I leave to-morrow for the Eagle's Nest. I shall be lazy there, as lazy as I can make the Judge. I have read a little Blackstone but not yet written the paper. I hope I shall find time at the Chalet to deal with it: I have all my figures and know pretty well what I want to say, so it ought not to be a difficult task.

How good of you to think of a hat for me; but it has not yet come. However, it would probably take longer than the letter and next post may bring it.

You express my thought that bright and joyous as our past life together has been, there is a fuller, deeper life before us, even truer comradeship and deeper love. That should be as we grow. I am glad that you call me your knight and that you feel the dragon slain. Take heart then and be full of rippling joy in life and its good things, as we walk together through the green paths allotted to us. And get quite well, for so we are, that however great our character and souls, we need good bodies, not indeed for the highest joys, but for so many things that help.

*August 25th, 1893.* — Just arrived at Annemasse after a good journey. I wish you had an Arabian Nights' Carpet and could come here by wish or I to you.

*August 26th, 1893.* The Eagle's Nest. — I talked about women's rights not unnaturally after staying with Mrs. McLaren, but there was no response from these happy people. I think they always feel I don't mean what I say when I talk what seems

to them a foreign tongue. Lucy indeed said she thought I was jesting. This is sad ; but the glad things are affection, endless good fellowship, and rippling laughter in the souls of 16 people. I return on the 7th, shall be in London on the 8th inst. I wish I could make holiday with you somewhere, but after the British Association I must return to Cardiff.

*September 8th, 1893.* 42 Park Place, Cardiff.—I had intended starting from the Eagle's Nest on Tuesday, but the heavens were cloudless blue and we went to see sunset on the Buet instead. The kingdoms of the world were at our feet. The Oberland and Zermatt mountains to the East, and the great chain of Mont Blanc glittered in the dying sunlight. Our party descended in the twilight to the Col de L'Échaud, and thence the snake of half a dozen lanterns wound its way picturesquely into the Valley.

I was glad to get your letter of the 5th this morning.

My movements are rather difficult to arrange. I ought to be at Nottingham on Tuesday night or early on Wednesday morning ; and I must be back in Cardiff on the night of Wednesday the 20th. I am very well. Do not be anxious. It is many years since I have been so well as during the last six months. . . . I feel we are going to have such a delightful time together in our new and beautiful house, and want you to get quite well to enjoy it. How full of good things our life is and may be.

*June 6th, 1894.* House of Commons.—I am here again 'lobbying.' The Deputation bids fair to be really successful.

*June 9th, 1894.* Cardiff.—I am well and well treated because of thy far-reaching arm.

*July 17th, 1894.* Chelsea Lodge, Tite Street, S.W.—I hope to be at the Leonardo at the National Gallery at 11 A.M. Ah ! but I shall be glad to meet ! Be ready for the House of Commons dinner party.

*August 22nd, 1894.* Cardiff.—I came down last night, so I was not present at the Aberdare Hall Council Meeting.

I have a tremendous lot to do during the next few days, and I cannot get away till next week.

Absence of sunshine here is making me think of the Chalet ; and I think I shall go there for a fortnight if things do not mend under this Welsh sky.

*August 25th, 1894.* Cardiff.—Very well, thou shalt decide for me and thou sayest Boncath.

Pray for fine weather. I hope to come to Boncath on Thursday. I have meetings on Monday, Tuesday, and Wednesday. On Wednesday Lady Windsor is going to lay the foundation stone of the Intermediate School in Penarth. We are asked ; I shall go.

*September 7th, 1894.* Charing Cross Hotel.—I attended



my meeting at Newport this morning and then came on to London. I leave to-morrow for Lausanne. I shall call at Villars-sur-Ollon (Aigle), and then on Wednesday go to Champéry and so by the Cols to Sixt. I have written asking Jack to meet me at Champéry.

*September 11th, 1894.* Villars.—Weather glorious—Aiguille Verte in full view with its Dru shoulder. I go to Champéry on Thursday.

We had a long walk yesterday to Les Plans. To-day is idle.

*September 13th, 1894.* Villars.—Am just leaving for Champéry where I hope Jack will meet me. Shall sleep there to-night and to-morrow go to Sixt by the Cols. The weather is perfect—summer not autumn. Yesterday we went up the Chamossaire (about 7000 ft.). There was a great panorama through summer mist. Three great ghosts on the eastern horizon—the Jungfrau, Mönch, and Eiger. Mont Blanc nearer in full view.

*September 15th, 1894.* Le Nid d'Aigle. Sixt, Hte. Savoie.—I came over from Champéry yesterday by the Cols de Cou and Golèze. I entered Switzerland to meet thee that way in 1879. I was very much less tired in crossing them yesterday than that first time.

Thou wilt meet me at Aberystwyth on the 24th, wilt thou not? I am already looking forward to it, counting the days. All here are well and everything as usual except that the Judge and Aunt Bertha are unusually well, the former rollicking.

*September 21st, 1894.* Le Nid d'Aigle.—Thy letter found me in the sun, outside the Petit Salon. The weather here is perfect, and I shall return much better for my short time in Switzerland. I am in fair walking trim. Yesterday we went by the Fenêtre des Fys to Salles and home by the Valley—about 10 hours of it.

The snow mountains from the summit were revealed in glimpses through the mists round us. (The giants were clear of cloud.) To-day I am idle and am basking. To-morrow I leave for home. I go to Grand Sacconex and shall have Charlie Pasteur for company as far as London. On Monday morning at 9.50 I leave Paddington for Aberystwyth arriving at 5.30.

Jack has discovered a new Arête, the Sixth. The Judge, Wilfred Greenhow, Jack and I went up it on Saturday. Yesterday I sat about in the garden all day—a peaceful Sunday.

*October 28th, 1894.* 40 Curzon Street.—All is well with me. The Committees are over and I have only to see Mr. Sawyer of the Drapers Company, and my instrument makers on Monday morning. I shall then return to Cardiff.

When the vacation of 1894 came, Viriamu Jones went to the Riviera for a short time in pursuit of sunshine and

to be out of reach of correspondence. Every year it was more difficult to secure any quiet in Cardiff.

*December 22nd, 1894.*—My cold is better. The bracing air here is driving it away. I leave to-morrow morning at 11 A.M. from Victoria.

I went to the Education Department to see Kekewich. The rest of the day I have been spending in trying to modify the Class List sent down on Friday by the Education Department—a solid three hours' wrangle, but with good results; then a little shopping; and now Brynmôr wants me to play chess.

*December 25th, 1894.* The Riviera.—I have had a pleasant journey and met in the steamer an old fellow pupil of Brynmôr's at Butterworth's—so I had and have good company. The weather is simply perfect.

*December 28th, 1894.* Grand Hotel, Monte Carlo.—Thanks for thy letter. All has gone well with me—weather delightful. Think of going to Bordighera to-morrow.

Monte Carlo is a queer place. A great number of human beings playing against machines with the odds against them! With systems and without systems! With small capital and large capital! A big machine levying its persistent toll.

I have played very little. On the whole I do not like it. I am clearly not born a gambler. But I have watched with a melancholy interest my acquaintances losing money, sometimes winning it to lose it again.

My opinion is that a man beginning to play on definite lines with considerable capital might on any one day very likely win—but that his turn will come and even the large capital go.

Thou must come and see the sight some day! It will at least be interesting, and this coast is very lovely. I shall be a happy man when we meet again.

*January 31st, 1895.*—I was at the Royal Society meeting this afternoon, where Professor Ramsay read the paper by Rayleigh and himself on the 'New Constituent of the Atmosphere.' No one was found to question its existence any more.

*July 4th, 1895.* London.—The days have been a round of meetings. The Matriculation business is finished off to-day. To-morrow evening I go to Cambridge, and thou I suppose on thy Swansea mission.

*August 20th, 1895.*—I arrived safe and in time.

I cannot leave till Thursday or Friday, and I am thinking of going abroad because otherwise letters and meetings will be my portion, but I have not made up my mind yet. To-morrow will see the settlement.

Brynmôr made a splendid speech in the House last night on Agriculture. It reads very well.

*September 1st, 1895.* Mrs. Wynford Phillips' Chalet, St. Gervais.—The weather here is perfect, no other word describes the sunshine. Yesterday we visited the Glacier of Bionassay and went up it a little way, cutting into the ice fall. We must sometime go to Montanvert together. There we are close to the Glacier and we might manage to spend days together on the Mer de Glace, which thou couldst not do when we were there last. We are soon to meet at the Nook. Tell me if thou art coming on the 10th, if so I will come immediately on my return a little later.

*September 29th, 1895.* Aberystwyth.—I arrived here safely at 5.30 yesterday afternoon—Mr. and Mrs. Grove, Claude Thompson, Howard, the Registrar and his daughter travelled in the same train. It was very hot—but the outlook fair to see all the way. And I emerged on the Parade here—a glorious sunset—a ruddy ball through the sea mist.

We had our first Committee<sup>1</sup> last night, but it was a small muster. Roberts is looking well after his holiday. He has been to Mürren.

*October 31st, 1895.* Bryanston Square, W.—I think I made a good address yesterday. After it Cadwaladr, Isambard and I travelled to London by the 6.5 train. At Crewe we got into the Scotch express and found a third-class dining-car, in which we got an excellent dinner—great are the blessings of a main line. Many friends at Chester, among them Lady Verney.

I am going to read the article<sup>2</sup> to Sarah Grand and McFall to-day, and in the evening there is a Royal Society Reception.

I am doubtful about that Domestic Servant training business.<sup>3</sup> Do not commit yourself till we have talked it over. It is a very questionable enterprise.

*November 1st, 1895.* Westminster Palace Hotel.—The Committee is to meet in a few minutes. I read my article on the position assigned to women in the teaching of the New Testament somewhat hurriedly to the McFalls yesterday. I do not yet know what they all think of it. I shall know on Sunday.

(I am staying till Monday because we shall have to be working most of to-morrow morning and to-morrow afternoon, and the Paulings are dining at Bryanston Square, and Morlais also to-morrow evening.) Mrs. McFall I think took it in, perhaps, also Mr. Chambers. But they were inclined to think it more

One of a series of University meetings.

<sup>2</sup> On the position assigned to women in the New Testament. Unfortunately this article was lost.

<sup>3</sup> A scheme to ask the Town Council's help to supply technical training and maintenance for children from elementary schools, during six months' apprenticeship in Housewifery.

serious than the *New Review* would look at and suggested the *Contemporary*.

*January 14th, 1896.* Cardiff.—I have been head over ears in work and to-day have two Meetings. The afternoon one just over. Opening of Technical School Buildings by Lord Windsor. The evening one, Distribution of Prizes of Technical School by Lord Windsor.

They are treating me well enough at home and attend to my comforts in an admirable way. There is an invitation from your Jewish friend for the 22nd, to go and hear Zangwill lecture on the Ghetto, at the Jewish Institute.

*March 7th, 1896.* Savile Club, 107 Piccadilly.—I expect to get home on Monday evening. Business goes well enough. Interesting enough but not worth writing about.

Art thou resting or holiday making? Spend enough time in *peace*. Dost thou remember Swinburne's line, 'Laborious peace'? I suffer that way likewise, so I speak feelingly.

In the summer vacation, he went on a short bicycling tour:

*August 6th, 1896.* Hôtel d'Albion, Rouen.—Rode here from Dieppe yesterday. Left Dieppe at one, arrived here at 6. When you leave Dieppe, if you do so by bicycle, get a little boy to wheel it up the long hill just outside the town for you.

*August 7th, 1896.* Grand Hotel du Grand Cerf, Mantes.—We arrived here last night at 6.15, a very good road from Rouen. Fifty miles a good deal of it along the river through charming scenery.

We leave at 12 o'clock for Versailles thirty-five miles' ride. I hope to hear that you have taken steps to join the C.T.C. and to mend the bicycle. There was no trouble in passing the 'B' at Dieppe when we showed our C.T.C. tickets.

*August 13th.* Tours.—We have been doing very well and seeing many lovely châteaux. We leave for Angers to-night and then go to Nantes, probably to-morrow; then by Le Croisic, Belle Isle, Quiberon, Vannes, St. Brière to Dinard where I hope to meet you on the 21st.

*August 13th, 1896.* Angers.—Came here by train to-day, go on wheels to-morrow to Nantes. Did I tell you we propose visiting, if possible, the grottoes of Locmaria where the great Porthos was buried?

*September 27th, 1896.* Ballybrack, Dublin.—The Channel was really wonderfully smooth. The sailor I asked about it said the tide had put it to rights.

It is very pleasant and restful here, but the wind to-day is strong and it is as showery as April. I wish you had come too,



but it was perhaps hardly worth while for so short a time. I shall not be back before Tuesday night. I quite look forward to returning to our peaceful home.

*November 21st, 1896.* 27 Bryanston Square, W.—I had my first lesson in Glass Blowing this morning and made some progress. Like all manual labour it is a great lesson in patience.

*December 31st, 1896.* Paddington.—I have just arrived here from Ripon and going on to Cardiff to-morrow morning. I fear the weather has been very bad with you. Rain and Rain and Rain it was at Ripon.

I feel I have had a very vagabond vacation, the beginning of the term will seem almost like a rest.

The following three letters were written in connection with his second Canadian visit—that to Toronto with the British Association in 1897.

*August 15th, 1897.*—Windsor Hotel, Montreal.—We arrived last night after a most prosperous voyage. All the world has been very kind to this lonely wanderer—and the fell disease has left him. Two days out there was recrudescence which promptly yielded to treatment.

We passed through the Straits of Belle Isle this time in the afternoon, not as before in the early morning. The Gulf of St. Lawrence, which we remember as a blaze of sunshine, was on Thursday a vapour bath into which the clouds of heaven were pouring.

We arrived at Quebec on Friday night at 10 o'clock—and landed for a moonlight walk on the Terrace below the Citadel. Nature put on her best air for our delectation, and that most beautiful city impressed herself very vividly on my imagination. I feel as if I should like to return and spend a week there.

There were about 150 British Associates on board the *Parisian*. I saw Sir John and Lady Evans, the Ramsays (Mrs. Ramsay as ever supremely at home on ship board, and knowing all things), the Boys, the Carey Fosters, the Michael Fosters of Cambridge Lodge, Unwin, Silvanus Thompson. There were a heap of other acquaintances. Next me at dinner sat Mr. Fowke, General Secretary of the British Medical Association. He said he had been an intimate young man friend of Uncle Winkler's, and he also knows Will and Alice. He was coming over for the British Medical Association's meetings which take place here at the end of the month. I found Higgs, Will's friend, aboard; and played several games of chess with him. He is excellent company. We got up a chess tournament aboard—and I was champion, which augurs, alas! but little for the play of the others.

I wonder where this letter will find you? With voyage over thou wouldst had enjoyed meeting all these pleasant people and I should have enjoyed all things doubly in thy presence.

*August 27th, 1897.* 52 Albany Street, Toronto.—The B.A. meetings are over. They have been a terrible rush. So many social functions mingled with the Science that one hardly found a moment to one's self. I was comforted to receive thy letters and hear of thy plans. Mr. and Mrs. Boulton have been as kind as they be. They have taken me several bicycle rides and Mr. Boulton is a chess player, something better at it than I am. We have played five or six games together. The week has been delightful. The papers went all well, and I think my piece of Mathematics and also the joint paper (Ayrton and I) on the Ohm were appreciated, especially by some American men of Science. The Electric Standards Committee have asked us now to determine the ampère and weight, offering us £75 for the purpose. We are about to consider how to do it.

I leave with Ayrton (Miss Ayrton has gone to Boston with the Barkers) by steamer to-morrow afternoon for Montreal. We then go by Lake Champlain and Albany to Boston; and I propose returning to England with him on the 8th ult. by the Bean Line. This means arriving in London probably on the 18th of September. I propose cabling to thee presently so that thou mayest know my movements before this can reach thee. Will it find thee still at Boulogne?

The package of figures *re* Coil came in good time—and I was glad, for it seemed to interest listeners to hear of that particular set of measurements.

I made considerable friends during the voyage, and since—Lady Evans, Mrs. Boys, and Mrs. Roberts Austin. The latter is very anxious about the question concerning the status of women—quite advanced. Sir John Evans was happy and witty during the voyage. His Address was about the antiquity of men.

Professor Ayrton is here, waiting to take this letter to the General Post Office.

The name of our steamer is the *Lake Ontario*.

*September 6th, 1897.* Young's Hotel, Boston.—I leave here to-night for Montreal, and sail thence in the *Lake Ontario* on Wednesday morning.

Ayrton and I left Toronto on Saturday week by the 2 P.M. boat and came up the St. Lawrence to Montreal, arriving Sunday afternoon about 6 o'clock. The Thousand Islands were pleasant to see—but not so fine a show as the 10,000 Islands we saw on Lake Huron. We left Montreal, Sunday evening, for Plattsburg on Lake Champlain, and went on board the steamer to sleep. This started at 7 a.m. on Monday morning, and we had

a glorious day on the Lake above mentioned and Lake George. These two lakes, specially the latter, are very beautiful and apparently great holiday resorts. In the afternoon we took train from Caldwell, passing through Saratoga (do you remember our Saratoga Food Hunt?)<sup>1</sup> to Schenectady where the great works of the General Electric Company are. We were hospitably entertained by one of the partners for two nights and I was glad to see the works—they showed that the electric industry is enormously more developed here than in England, especially in connection with tram-car locomotion.

We came on here on Wednesday. Ayrton is now with Professor Elihu Thompson at Lynn, where Miss Ayrton has joined him.

The weather has been so lovely in Boston that I have been inside very few of the buildings, but I have seen their outsides and ridden much in the electric cars (5 cents a ride), which is an admirable way of surveying the city. Yesterday I took steamer to Bass Point. The harbour here is really fine.

*December 17th, 1897.* 27 Bryanston Square, W.—Yesterday I spent mostly with Ayrton discussing the measurements of the ampère. I went in the afternoon to the Physical Society and then returned to dinner here. Morlais turned up, he had just come back to London from George Pauling's, where he is putting in electric light. Business he says is flourishing—he is going to the Cape in March.

I leave in a few minutes for Cambridge—and am going to spend an afternoon in the laboratory with Glazebrook measuring coils. I shall hope to be back for dinner on Monday, and glad shall I be to be home again.

*February 16th, 1898.* Cardiff.—I am having a great deal of travelling. I have to go on Friday morning to Llandrindod to a meeting of the Central Board. Thence on Saturday to London to a meeting of the Judicial Committee of the University Court at Brynmôr's Chambers. A knotty point as to the meaning of the Charter has to be decided—the question as to whether a Department can have two Heads both entitled to seats on the University Senate, e.g. Mr. Rayment and Miss Hughes, in Education.

The Drapers Company decision means a good deal of work for me, but it is good work and I am looking forward to it.

<sup>1</sup> In 1884 the British Association left Montreal at 7 a.m. for Philadelphia. Expecting restaurant cars, they were unprovided (it proved to be a journey of 18 hours), but were told the train was to stop for lunch at Saratoga. Unfortunately the home of luxury provided only a frugal and scanty lunch in paper bags, distributed at a turnstile. Professor E. B. Tylor, wiliier than others, secured a large open jam tart on a tin plate. Standing in the doorway of the saloon, paper bag in one hand, jam tart in the other, he generously offered to share the latter with Viriamu and his wife.

I do not know where the apparatus will be put. There is no room for it here, at any rate in the College—even the cellars are occupied. Maybe I will put it at Ripon, perhaps at the Drapers Hall. Perhaps at Oxford.

I have been enjoying my lectures on Magnetism to the Intermediate Class very much. It is a very intelligent class, and they look as if they enjoyed it.

*February 21st, 1898. Cardiff.*—Most of the Zola books are here except 'L'Assommoir' and 'La Débâcle'; but persuade —— to do something better with her holiday than read Zola. It may be very able, but it is very miserable and not at all in accord with the proper holiday mind. —— ought to have real rest and these terrible books are not restful.

I went to Llandrindod on Friday morning, left by the 8.40 train in pouring rain. It became snow at Builth Road and that continued most of the afternoon, then came a hard frost. We had excellent meetings and I arrived home at 5.30 Saturday.

I ought to have gone this morning to Llandaff Petty Sessions, but forgot all about it. I must really take to an Engagement Book; the worst of it is when I have one I forget to look at it.

I am off to a meeting of the Medical Faculty at the College.

*August 2nd, 1898. Hôtel du Rhin, Amiens.*—Left Boulogne on Monday afternoon and passed through Étaples to Montreuil, a wonderful old town with medieval ramparts turned into a circumferential park. On Tuesday we went to Crécy, Abbeville, Ailly-le-haut-Clocher, Le Longpré, and yesterday morning came on here. The poplars of the Somme Valley are very beautiful.

Yesterday afternoon we spent some hours at the Cathedral. Do you remember in the Choir Job and his Comforters? The South-East Comforter is an extraordinary piece of carving; I think I never saw anything more expressive in wood.

We go to St. Quentin to-day.

*August 6th, 1898. Au Lion d'Or, Rheims.*—Here we are at Rheims after six days' journeying from Boulogne. Isambard is a good goer. I can go faster and perhaps further in a day—but he goes on day after day and I dare say he could keep it up longer. At any rate for so thin a frame it is a good muscular body.

Almost all the time I spent at Amiens in and around the wonderful Cathedral. Apart from the general effect, I found that now after four days my most vivid recollection of detail is that of a wooden carving on the left-hand side of the choir as you pass in—the carving of Job and his Comforters, especially the Comforter on the South-East corner of the group of four. I see the face now with the joy piercing the affected sympathy.

On the 4th we went from Amiens to St. Quentin—about



fifty miles, but it was a very light day because the wind was behind us. I think I never rode faster than during part of that journey, 19 kilometres, i.e.  $11\frac{3}{4}$  miles, in three-quarters of an hour.

St. Quentin at first sight was disappointing, till we got to the hotel, and then it was not disappointing because I found letters waiting me. The Cathedral [at Laon] is singularly beautiful, with four great towers visible from a great distance on every side.

Yesterday afternoon I came on by train (it is now August 7th, Sunday) here to Rheims. Isambard rode the 30 miles conscientiously, but I was tired of looking at a road 10 feet ahead—and lazy. The Cathedral I have only viewed a little as yet—but it is indescribably beautiful. So aerial and light a fabric of stone I have never seen before. The canopy over the Virgin over the middle great West door is of fretwork, and seems to have descended from heaven to rest there. We are going on this afternoon to Épernay or further towards Fontainebleau.

*August 10th, 1898.* Grand Hotel, L'Aigle Noir, Fontainebleau.—We start to-morrow morning for Dijon, whence Isambard returns to London while I shall go by the Col de Faucile (Jura) to Geneva. I shall call at the Pasteurs and then go on to Sixt.

We left Rheims on Sunday, and riding against a high wind came to Épernay. It rained all Sunday night, so we went by train to Romilly on Monday morning; and rode in the afternoon to Nogent-sur-Seine. Then began storms, and after starting for Bray 'en bicyclette,' we turned back to Nogent and went by train to Montereau at the junction of the Seine and Yonne. It was fine this morning and we rode over here. The Château is very gorgeous, but it is not as interesting in point of historical pictures as those we saw together. The Forest is lovely.

*August 11th, 1898.* Hôtel de l'Est, St. Florentine.—We came here through Sens from Fontainebleau yesterday. To-day we go to Montbard and on to Dijon to-morrow. Thence Isambard returns to England and I go on to Sixt by Geneva, crossing the Jura by the Col de Faucile.

*August 14th, 1898.* Hôtel de la Cloche, Dijon.—I start for the Col de Faucile (Jura) to-morrow and hope to go back by Nyon and Thonon to the beautiful valley where we made the friendship —.

I arrived here last evening with Isambard. He started at 7.40 after dinner for Paris. I have been resting all day and enjoying the rest thoroughly after our hurried ride from Fontainebleau. I am going by shorter stages through the mountains and I suppose there will be a good deal of walking and pushing my bicycle up to the Col.

*August 18th, 1898.* Hôtel du Fer-à-Cheval, Sixt.—I arrived

here last night from Thonon. I left Dijon on Sunday afternoon and slept that night at Dôle. Leaving Dôle on Monday morning at 11 I made through Mont-sous-Vaudrey and Poligny for Champagnole in the Jura. Poligny is the gate of the mountains—one makes first ascent there and looks back on the great plain fading away into blue distance. From Champagnole I crossed the Jura on Tuesday by the Col de St. Cergue to Nyon. At St. Cergue I had a superb view of Mont Blanc, Aiguille Verte and Dent du Midi. I never so well appreciated the Byron line 'Mont Blanc is the monarch of mountains.' At that distance all others were bowed before him. And the great Lake Lemán at one's feet made an impressive foreground. I left Nyon yesterday morning by boat for Thonon, and thence pushed my machine about 3,000 feet up (poor fun) before I made the Col de Cou which landed me in the Valley of Boige whence I gained the high road along which the tramway runs about 7 kilometres the other side of St. Jeoire, where 20 years ago we lunched on our way to Sixt.

*September 5th, 1898.* University College, Cardiff.—I am weary with a long meeting and I am busy with meetings till the 14th inst., perhaps till the 16th. On Friday the 15th inst., and morning of Saturday I have a University Meeting at Shrewsbury.

*September 8th, 1898.* Rodborough House, Percival Road, Clifton.—I was cured of my slight attack of indigestion, it must be that, at any rate it is now gone.

Professor Ayrton gave an admirable address this morning in Section A (he is President), chiefly on the sense of smell. He has been using Mrs. Ayrton's nose (having a poor one himself) in a series of experiments. The Poultons, the Ayrtons, the Lodges, Professor Rücker, and many others are here.

*September 9th, 1898.* British Association Reception Room, Bristol.—All is well with me. This morning's section was an interesting one. Lord Kelvin held forth at length on the Dynamical Theory of Reflection and Refraction.

Does it mean help for thee to be with me? I think it does help in every way, but I know it helps me in one, for thou art a sustaining force and I am happy with thee.

*October 2nd, 1898.* Cardiff.—I had a very busy time at Aberystwyth from Wednesday evening to Saturday morning. We finished our business at a quarter past twelve so I caught the 1.15 train and got home at 8.30. I slept late this morning and am fresh enough after it all. Yet I miss thy sympathy for I have a great many letters to write. And a busy week is coming. The week-end I must spend at Brecon with the Registrar preparing University Documents.

Mrs. Roberts returned to Llandrindod yesterday whence

she had come to welcome Reichel and me as her guests on Wednesday.

*October 14th, 1898.* Shrewsbury, 9 P.M. I had a long sleep and was the better for it and left by the 10.15 train for Shrewsbury, arriving here at 2 o'clock. We have been sitting in Committee ever since save for an hour's interval for dinner. I am writing this in the middle of discussion on the Leaving Certificate examination. Bum—bum—bum—bum—bumming away.

*October 16th, 1898.* Cardiff.—To-morrow morning I am going to sit for Miss Riches a little—while she begins to model me in clay. She made a good bust of her father a little while back. I have to read out of 'Lachrymae Musarum' on Tuesday evening to the Teachers' Guild Meeting.

Alice came to tea with me this afternoon. She seemed very merry and was good company; we played chess after tea.

*October 23rd, 1898.* Cardiff.—I returned from Shrewsbury yesterday afternoon. Last night I had a little dinner party, Alice, Miss Hurlbatt, and Miss Healey. We read things after dinner. Alice has just been in supping with me again to-night.

On Tuesday I go to Aberystwyth for meetings. The new buildings there are to be opened by Sir William Harcourt on Wednesday. The University Court Meeting is on Thursday, and on Friday Central Board meets at Shrewsbury.

My cold has nearly gone.

I am glad Alice thought the readings on Tuesday evening successful. The programme was:

1. Sibrandus. (Browning.)
2. De Gustibus.
3. The Sin of the Bishop of Modenstein. (A. Hope.)
4. The Householder. (Browning.)
5. One Word More. (Browning.)
6. Prospice. (Browning.)

*October 30th, 1898.* The Lodgings, Jesus College, Oxford.—I came up here yesterday morning from Shrewsbury for a 2 o'clock Meeting of Fellows, the last I shall have to attend for the present, as my year of Fellowship soon ends. I have had a very busy week. On Wednesday a long series of meetings at Aberystwyth, Governor's meeting at 12 o'clock, Public Luncheon at 1.30, a Meeting addressed by Sir William Harcourt with opening the new buildings at 3 o'clock; and then in the evening Dr. Butler's (Master of Trinity) Lecture. It was all very interesting. Sir William Harcourt fixed a name on me in one of his speeches. He said I was 'the sturdiest beggar that ever successfully collared a Chancellor of the Exchequer.'

On Thursday we were all day at University meetings. Court from 10 to 1.30, Congregation for admission to Degrees, 3 to 4; and Court again from 4.15 to about 8 o'clock.

“ On Friday at 8.25 I left for Shrewsbury for the Central Board Meeting which was a good one. We settled the conditions of the award of certificates on the result of the annual examination of the Schools, which is a move forward. I am tired but shall have a good rest on my return to Cardiff to-morrow.

*November 25th, 1898.* Shrewsbury.—I have had a terribly busy week and am taking a holiday ! at a Meeting of the Executive Committee of the Central Board, where we are discussing the Duke of Devonshire's Secondary Education Bill of last Session. I am going up next week on Wednesday, and am going to stay at Chelsea Court with Uncle Alfred.

I am very well in spite of the work. I read ‘ The Pope ’ at Penarth on Tuesday (Turner House Browning Society). And on Wednesday night I went to a party at Aberdare Hall, only other visitors Mamma, Mrs. Charles Thompson and the *cheery President* [Miss Williams]. I think she was very happy at the Meeting. I read that night to the students ‘ The Pied Piper ’ and the ‘ Miracle of Purun-Baghat.’

We are now entering on the consideration of a new Bill here, and I must attend.

*November 29th, 1898.* Cardiff.—I am going to London at 11.15 to-morrow. I am engaged with Humphreys Owen from 2 to 4, then I have a Royal Society Meeting, then I go to Chelsea Court, then at 6.15 we leave for the Royal Society Dinner ; then on Thursday morning I have an interview with Sir John Gorst. Then on Thursday afternoon a University meeting at Westminster.

*December 8th, 1898.* Cardiff.—I have had a terrible week of meetings. Senate and Council and Technical Instruction Committee, and last night I addressed the Trades Council on the advantages of our educational system to the artisan and labouring classes ; they were very kind, and I enjoyed myself very thoroughly with them.

I saw Lewis Williams on Tuesday evening. I told him you would probably not be able to be here for the election (School Board). His face fell to black melancholy when I said so, and he said even if you were here for only two meetings it would help them greatly. I said that thou wouldst be quite anxious that another candidate should be chosen if they thought that it would be better, but this did not smile upon him.

*December 13th, 1898.* Cardiff.—I had a busy time at Shrewsbury, and spent all Sunday editing the University Scheme of Study for 1900-1901 ; and now my work is well on and I am beginning to think of holiday. I wrote to Uncle Alfred asking him if he would go with me to the South, but have not yet heard from him.

*December 24th, 1898.* Monte Carlo.—I am at the Hôtel



Windsor, sitting at a Southern open window in full blaze of a very hot sun, and with all the lovely panorama that you know in front of me. I travelled down comfortably, but the train was an hour late at Paris so we missed the Central Railway train and had to drive full pelt to the Gare de Lyons. I arrived just in time to secure a *lit salon*, having had no dinner; but I was lucky, for the lady, the only other occupant, produced dinner for me out of a capacious basket and was very gracious to the intruder. She was a Mrs. Hanson, and travelling down here to cure herself of a grievous cough. My registered luggage is still on the road. The Binghamms came down on my train. I hear that my friends Duncan and Fox are here.

I dined here last night, gossiped with ladies in the Smoking Room, then went to bed and slept like a top.

*Boxing Day*, 1898. Hotel Windsor.—I am enjoying the pleasant sunshine, not the shaded rooms. The place is not very full as yet.

I went over to Nice yesterday and lunched with Alderman Carey. He is better, but has been very ill. I met there the Warden of Llandovery and Professor Williams of Lampeter. I am glad to hear good news of Haycraft.

I am reading almost nothing here, and am going to bed very early. I think Sir George Young's letter in *The Times* about the University of London a very good one.

*January 3rd*, 1899. Hôtel Windsor.—It is a lovely day save for a strong wind, the Mistral. I lunched with Fox on Sunday and met the Lord Chief Justice—a very able man but not humorous. I had a long talk with him afterwards, but not much of it remains with me except the account he gave of the Hudson's Bay Company of which he was once a Governor. Monday evening I dined with the McKennas, and we talked of many things. Reginald McKenna combated my view that 'Diana of the Cross-ways' fails in that one feels the author libels the heroine.

*January 18th*, 1899. Cardiff.—All is well with us. My indigestion is quite gone and I have been for the past two hours happily immersed in Elliptic Integral Calculation consequent on a communication Professor Greenhill has sent me about my paper to the Royal Society.

*January 20th*, 1899. Cardiff.—I have been reading Parnell's Life all day. I think it will interest thee.

*February 11th*, 1899. 6 Delahay St., Westminster.—I am here waiting for Morlais after being to the Fine Arts Club in Savile Row with Mrs. Cadwaladr Davies and Isambard and Reichel to see some Burne Jones drawings. The artist certainly made pencil drawings and pen and ink on vellum drawings that are amongst the most beautiful I have ever seen. The minute work of the pen and ink drawings is marvellous.

Yesterday afternoon we had our Committee Meeting and then I dined with Brynmôr, Humphreys Owen, and Wynford Philipps at the House of Commons. They were all expecting a Welsh Debate to begin—but the other amendment continued till 12 o'clock, so the Welsh amendment gets a good place on Monday. Herbert Lewis is to move it.

Some of Viriamu Jones' friends have felt regret that his life had not been spent in a wider sphere, that his keen and persevering mind, his fine spirit of statesmanship, the lovable nature that won over opposition, the patience in the pursuit of high disinterested aims, might have served what appear to be greater ends. But his chosen work brought him joy : he found his holiday in his work, as the 'river finds its holiday in its onward flow, the fire in its burst of flame.' He gave himself to it and rejoiced in the giving.

Mrs. Lamb, his wife's friend and his own from the earliest days of their married life, wrote :

Do you remember the first time we met at the Chalet ? You and Vir came in out of the darkness having walked up from Sixt. I have been going over all the times. Oh, Vir was happy ! His life was quite full of work and love—successful work, creative work. So many go through life wanting their fruition and never getting it.

But his physical powers were not equal to the strain, and after 1896 this became gradually more and more evident. To all entreaty or suggestion that the work might pause or be devolved came the unvarying reply : ' I *must* do it.' As his cousin Morlais said, ' the work Vir did for Wales could not be done by a man who could spare himself.'

Owing to the rapid succession of Education Acts, the whole system of Welsh Education—intermediate, technical, and university—had to be organised simultaneously ; for the part Viriamu Jones took in this work he had to hold clearly in mind the many threads from which the complex structure must be woven, and in addition to this mental labour, the heavy demand on time and physical energy in the incessant railway travelling, grew heavier each year after 1893. Besides his more obvious work he was a member of other Technical Instruction Committees as well as that

of the County of Cardiff, Vice-Chairman of the Intermediate Education Committee, and the number of administrative details at the College had grown with the growth of new departments.

The University Court, Senate or Committee meetings at Shrewsbury required two or three days away from Cardiff in three out of four weeks for some years; and these meetings, which might begin at 10 a.m., went on till 11 p.m. or later, the adjournment for meals being rather a change of scene than a cessation of work. In such ways as this the amount of work gradually increased over a long period, and even to devolve part of the College administration would have meant a sacrifice of time that the Principal could ill spare. His view of the University was that it should develop on the lines he had conceived; this meant that at the meetings held to discuss the constructive ideals, the courses of study and many other details, Viriamu Jones was continually called upon to explain and justify his position.

He was, as Vice-Chancellor, Chairman for the examining bodies of all the Faculties which were then holding examinations in Cardiff; examiners were working in his house, and the Chairman of the Central Board was visiting him, when in the summer of 1899 he became seriously ill. He had worked for so long without complaint, overcoming physical conditions by determined will, that those who attended him were naturally unable to realise his critical condition or to understand the excessive pressure of the work of the last three years. The only hope of recovery lay in immediate and absolute relief from responsibility and a long period of rest.

After six weeks in bed, with but little amelioration of the worst symptoms, he was recommended to travel in Switzerland, and went with his wife, in August 1899, to the Swiss valley he loved and the chalet which had so often been a home to them. Three days after they arrived he was so ill that peasants from the village four miles below had to be summoned to carry him in a *chaise à porteurs* to the valley. He uttered no word of complaint in that

long and painful journey, nor during the days and nights of suffering that followed.

Je fus frappé de sa figure intéressante et bienveillante malgré les souffrances qu'il endurait ; il me fit l'effet d'être très gravement malade. Je me suis très vite senti gagné par une grande sympathie pour lui et j'avais l'impression comme si je le connaissais depuis longtemps—

wrote Dr. Pasteur, who attended him as soon as he reached Geneva.

After a week of suffering, his wife was warned that he could not live for more than twenty-four hours ; but, with the help of a great specialist, he made a temporary recovery, and when his devoted youngest brother Morlais arrived from London in anxious haste the worst was over, and he had the pleasure of watching the patient's improvement. A fortnight later, Viriamu was cheered and delighted by a visit from his brother Brynmôr and his wife, and from his brother-in-law, Mr. S. Home. Again convalescent, deceived again by his temperament, the doctors' orders were relaxed and a grave relapse followed, after which a six months' rest was counselled, though not the resignation of his post.

It is impossible to express the pleasure he derived from the sympathy of friends, the messages from the Council and his colleagues at the College. Lord Tredegar said :

I can hardly say how much help I have received. There is a way of teaching old people, and the Principal has a thorough knowledge of it. He possesses a clear head, and has that kind and sympathetic way of imparting knowledge that leaves no impression on the mind of the taught that he is ignorant and needs teaching. He always answers a difficult question with clearness and harmonious intelligence.

Mr. William Rathbone wrote, November 3rd, 1899 :

We have been very much grieved to hear of your illness and that it might be some time before you ought to resume work again. But I was glad to hear, when at Bangor, that your advisers say, that if you will be prudent, you may be better in health than you have been for many years, and able to carry on, even more vigorously than ever, the great work of which you have been the main organiser and conductor. I hope you will get entirely away from all thought and trouble about the South Wales



College ;<sup>1</sup> for it is as necessary in the interests of the College as of yourself. If you can turn your mind and thoughts to other matters than the detail of the College, the rest will be more complete ; but I am sure it ought to be far more like a year than six months ; and, at any rate, absolutely for the last named period. But if you attempt to think over and direct the College, I do not believe you will get the real rest you require, which should involve entire change of occupation both bodily and mentally. Moreover, it gives your colleagues a chance of development ; which, with such an energetic chief as you are, I opine they could not have when they had you constantly to fall back upon. And I think you will find them far more helpful, and yourself relieved from much detail—which was not only wearing but impeding to the central force of the work, I believe, from actual experience on this subject. When you get back to work, you must take things easily at first ; for you will find that, like a horse turned out to grass, you will have to get into condition again, mentally and physically, before you feel the full benefit of your holiday.

When I was about 38, I had entirely to give up work, and read and play for a year and a quarter ; and my work, which I vainly thought could not get on without me, had not only been satisfactorily done, but clerks had developed into very useful colleagues.

Principal Roberts wrote :

*Oct. 23rd, 1899.*— . . . You know that you have the deep sympathy of your husband's fellow-workers in Wales. On every hand his illness has evoked remarkable evidences of personal attachment as well as of admiration for the service he has rendered to our country. I suppose complete rest of mind and body is the main condition of the gradual recovery, which I am thankful to believe is now to a large extent assured. I have been thinking that few men have more reason than he to rest for the present and to feel a pure joy which nothing can take from him in the consciousness of great work already accomplished, of having filled a great place in his country at a great juncture in its history. He has taken the leading part in shaping the growth of a noble College, and has gained for himself, and for Wales, distinction in the world of science. But in addition to this he has contributed to Wales as a whole some things of first-rate importance, in which, so far as I can see, he was the man whom the work and the hour called for ; that our University, in the quality of its initial structure, is comparable with the best of those of other countries is very largely due to the power, the concentration,

<sup>1</sup> In spite of the most generous consideration of staff and colleagues letters asking advice came all through the months of his absence.

and the high enthusiasm he has brought to its service. All this is matter of common recognition, but I dwell on it now as a reason why he should rest so long as need be in peacefulness and thankfulness of mind, and so prepare for the work that the future has yet in store for him.

T. F. ROBERTS.

London : October 29, 1899.

MY DEAR VIR,—The Standing Executive Committee met on Tuesday. I need hardly say how deeply grieved all the members were to hear of your temporary disablement. Wanting words to express what they felt, they ordered the Chairman to find the language for them. But why need I marshal words for the purpose? You know what our colleagues would wish to express better than words could state it.

Reichel has thrown himself into the work of the Vice-Cancellariate with great energy. He was with me here from Friday to yesterday. We spent most of Sunday on wheels; Reichel on a 'free-wheel,' with which he was mightily pleased.

Financial affairs seemed to be going all right.

Humphreys Owen was at the Committee. Neither Roberts nor Snape came.

It has turned very cold here. Most people are starting fires; there has been snow in Yorkshire.

With kindest regards to all,

Ever yours,

ISAMBARD OWEN.

September 27, 1899.

MY DEAR MRS. JONES,—I have delayed answering your last letter till I could have an opportunity of consulting the Executive Committee of the Court which met yesterday. I communicated those parts of your letter which bore on the question of a substitute for the Vice-Chancellor, and some general discussion followed.

I am putting myself in communication with Mr. A. E. Williams, and I trust Vir will not trouble his head any further about business matters. I take over the entire responsibility, and never felt fitter to grapple with work. If necessary, I shall run over to Cardiff and get everything into shape with Mr. Williams, as soon as the Senate meeting is over. Please don't allow Vir to give another thought to the matter. Both at the Executive Committee of the Senate last week and that of the Court yesterday the warmest sympathy was felt and expressed for you both; and when I get back to Bangor I have to draft

with the Registrar a formal resolution on the subject. We felt quite lost without him. It was a consolation to us to think he was getting a real *epoch-making* rest.

The Senior Deputy has presented the University with two lovely steward's wands (ebony with silver-gilt ends) for the Degree Ceremony. They are chaste and elegant to a degree, and I feel as I look at them in the rack overhead somewhat as Mr. Peter Magnus felt when he thought of the trunk and the brown paper parcel—'There is a suit of clothes in that trunk, Mr. Pickwick, which in the effect they will produce will, I believe, prove invaluable to me.'

I write in the train, as I shall have no time for anything once I get back.

H. R. REICHEL.

Bangor: October 29, 1899.

MY DEAR MRS. JONES,—I have been rushing about for some days past on Central Board business or I should have written sooner.

Pray let the money question stand over for the present. It is clear that Vir must be kept absolutely clear of all business worries for some time to come. When he is better I have no doubt we shall be able to settle the question satisfactorily.

On Friday we passed in the Central Board meeting at Newport a resolution of sympathy and condolence, and also in our own Court of Governors last Wednesday. The feeling is strong and universal. These education meetings seem quite a different thing without him, shorn of their full proportions.

I am hoping to hear better news of his progress than when I was in town last week for the Executive Committee. Then Brynmôr's account made me feel very anxious.

I myself am in the rudest and strongest of health, which I keep up by a good ride whenever I can get a free afternoon.

With our united warmest regards, and with my love to dear old Vir,

I am,

Most sincerely yours,

H. R. REICHEL.

The Registrar of the University wrote :

I hear that there was a quite remarkable scene at the meeting of the Governors at Cardiff on Wednesday. Nearly every member of the Court got up one after another to express sorrow and sympathy for you and the Principal. People thought at one time that the speaking would never end. Everybody is very anxious indeed to see you both back again, but at the same

time each will be satisfied to know that all is going on well with you and that you are resting and recuperating.

Whether in the University, at the College, or on the County Councils, his relations with his colleagues had always been of the happiest. In the spring of 1900 his wife heard from the junior Counsel to the University, Mr. Cadwaladr Davies :

The Principal's ears ought to tingle a good deal, for we all talk about him a good deal, and in North and South Wales I constantly hear his name mentioned in terms of honour and affection. His absence is deplored by everybody, but his life work goes on because he has left his inspiration with us all, and we strive to give effect to his educational ideals.

I must tell you quite plainly you are invaluable. *Please*, do not hurry, for we want your really inestimable services unweakened by relapse, wrote Dr. Ellis Edwards of the Theological Board.

Hôtel Volta, Como, Italy :  
September 18th, 1899.

MY DEAR OLD FELLOW,—To say how grieved I have been on account of your illness is to express myself inexpressibly feebly, and the last letter which your wife was so kind as to send me giving the joyful news that the true cause of your illness has at last been fathomed is the most delightful and cheering welcome Italy could have provided us with.

Language is, however, very inefficient to express one's real feelings, because convention leads people to substitute superlatives for comparatives, or for even positives. It would be very convenient if, by some kind of social freemasonry, one was able to take an oath in order to imply, not merely that one was speaking the truth, but that one was giving the right value to all one's adjectives and adverbs. In that case 'to be sorry' would mean a keen sense of grief, and to be 'very sorry' would imply the feeling that I have for you, and have had for many weeks past.

I am afraid you must have thought me neglectful in not writing oftener, but a feeling of inability to express what I have felt has more than once deterred me when I was on the point of writing. I wonder whether the people who are sometimes called silent poets—people who, I presume, are full of the *im*-pression but lack the power of *ex*-pression—are rendered dumb when they would like to be fluent, because they fear that the melody of their thoughts will merely result in a jingle of commonplace words.



Well, you will have received hundreds of letters of condolence, and every conventional phrase of sympathy will have become hackneyed : so that even now I should hesitate to write to say how I have sorrowed for your pain, were it not that I write to ask whether at the end of this week you would feel well enough to see me if I came to Geneva for a few hours. I would not talk electricity—indeed, I have been led to rather avoid this and similar subjects for weeks past, warned by sleepless nights, constant heart-aches and irregular vision.

Eddie and I have come here to Como, nominally for the Volta Congress, but really so that I might have the sea voyage, Southampton to Genoa. The passage was a record one as regards the absence of wind and waves, but the Captain was cursed with an infatuation for spotless decks, so that from midnight onwards pail after pail of water swished over me, the hose poured forth a stream into my ears that would have put out the fire of London, and the entire ship's company seemed to be doing a break-down dance immediately on my head.

But no letters, no telegrams, no post to catch, the impossibility of giving any instructions was blessed, and how glad I felt for six days that wireless telegraphy was in short clothes and not likely to outgrow them for some time yet.

Eddie is now studying Italian hard, after having listened to Righi reading eighty pages of printed oration about Volta, while the King visibly nodded and the Queen ate lozenges out of a gold box to keep herself awake.

When I came here yesterday I was quite convinced that Volta did a splendid bit of work inventing his pile, etc. But as it has taken some hours this afternoon to prove it I have become doubtful.

I motored back to London from Yorkshire, and if you think that there are any ways in which a motor-tricycle can break down that have not already occurred to you, I shall be happy to supply you with a graphic account of them. Because I conclude that I must by now have had experience of most of them all.

A copy of Fleming's Friday evening's B.A. discourse was presented to the King, the Queen, and their eldest son, the Prince of Naples, this afternoon, but there was no further copy for his wife, so she had to look over her mother-in-law's copy. But I noticed she did not look long, and the copy in its gaudy binding was handed over to a long-suffering lady-in-waiting.

Yours,

W. E. AYRTON.

41 Kensington Park Gardens, W. :  
May 23rd, 1900.

MY DEAR MRS. JONES,—We are revelling to-day in a holiday born of the Queen's Birthday and the Relief of Mafeking. Mad we have all been the last few days, and now we are hoarse with shouting and limp after our exertions like the flags which draggle from the house-tops after the rain of the past 24 hours.

How is *the* patient? We hunger for news about him.

Three weeks ago I spent a night in the Park Hotel, Cardiff, and I thought much about you both. The Corporations of Cardiff, Swansea, Newport, and the Urban District Council of Barry wanted my assistance electrically to guard their interests against the invading encroachments of the 'South Wales Electrical Power Distribution' Promoters, and I have had to read up the Cardiff Corporation Act of 1898, &c., &c., and learn how the Corporation, in its efforts to bestow countless wealth on your patient's College, acted illegally, &c., &c. My accent has become quite Welsh, and I have grown wholly Celtic. And in spite of all temptation I did not betray to the Mayor and the Town Clerk at lunch my information about your husband's gambling propensities—indeed I did worse, for I persuaded my fellow-traveller, Mr. Hammond, to give me, for you, a pack of 'Scientific Whist Cards,' the outcome of an invention of his. . . .

Your husband will have to acknowledge when this pack of cards reaches you, that great as may be the achievements of a Maxwell, a Hertz, a Rayleigh, or a J. J. Thomson, the invention of a plain practical Electrical Engineer, a Mr. Hammond, is greater than them all.

With our united and best love,

Yours most sincerely,

W. E. AYRTON.

At the end of 1899 his cousin, Morlais Jones, wrote :

I am delighted to find that Vir has absolutely given in, that he does not try to think and does not condescend to worry. That is the only way to get well. Did you ever notice that once or twice in his career the Apostle Paul (I must get my illustrations in the book with which I am most familiar) was in great danger of breaking down and wrecking his career by over-work and over-anxiety, and that God *compelled* him to take rest by moving somebody to imprison him. To be sure Paul could not keep himself absolutely quiet even in prison—nearly all his famous epistles were written in prison—but imprisonment relieved the pressure of work a little, and the Church has been richer perhaps by what Paul did in prison than by what he did when he was at

the height of his activity as a preacher. I shouldn't wonder but that Vir's enforced relaxation from work may give one or two incipient ideas of his time to mature and define themselves, but he must not under any conditions dream of work. Have another honeymoon together. Be wise and make love to one another. But there—I fall into advising people before I know it. Please forgive me.

January 20, 1900.

MY DEAR OLD J.V.,—This is to welcome you back to the prospects of complete health. We had heard too grievous news of you, and knew not what to hope or to ask. Now that you are safe through the wood, goodness be thanked; come back to run us—but (lordsake!) run yourself more discreetly. When I think of you, I thank *my* stars that made *me* a bad sleeper and a cordial detester of railway travelling; for though in neither respect has Providence provided (as Providence should) for the shorn lamb—for it gives me too little of one and too much of 'tother—I take precautions and molly-coddle with serious persistency. I am old enough—nay my missis too—*we* are old enough, to take it hard when real friends are in straits; under forty I don't think one grows the fellow-feeling, the sense of common destiny and the supreme significance of *amicitia*, which, after the Good Will, has most of the absolute goodness of life in it. 'Fellow members' we are, so keep yourself in good trim for those who love you. We cannot afford any diminution in the life and generous cheerfulness of which you are the conduit.

I haven't been to Cardiff in your absence. I had no heart to it.

We have been going, with ups and downs, pretty well. The downs were divers colds and lumbagos; but we are quite topsides again of our ailments. I launched a book in July—'Common Sense in Education'—which, to my genuine surprise, has had a great success, both press and public doing the generous by it, though I put it together rather hastily. Longmans tell me they will soon be wanting another edition. It is not dull, but you mustn't think of so doleful a subject as education till your muscles have grown again, and your nerves are strong.

It was very kind of Madame Toi to write A. B. so long and sweet a letter. My best bow to her, and our united loves; she's a Brick. She is the Right Sort. She is First Chop.

You are not to answer this, just take it as a wag of the tail.

Ever yours affectionately,

P. A. BARNETT.

95 Gower Street :  
June 13th, 1900.

MY DEAR PRINCIPAL,—I hope you are well thro' your vexations by this time. They have been a grief to many. It is not right that you should be buffeted like this by messengers of Satan.

Yours sincerely,  
W. P. KER.

March 30th, 1901.

... I hope you won't be offended if I urge *strongly* your listening to Isambard's voice if he advises you not to go back to College next term,<sup>1</sup> but to take a clear rest till October. I do so not merely as a private friend, but in the interests of Welsh Education. I speak quite deliberately when I say that of all the men now engaged in running the Welsh Educational machine (Isambard apart) you and you alone are irreplaceable, and it would be a calamity of the first order if we lost you.

Affectionately yours,  
H. R. REICHEL.

These expressions of the friendship between him and his fellow-workers were renewed in tributes to his memory after his death. No man could count more friends. Many wrote of him ; and the burden of all the letters was the same.

Outside your own family circle, no one in all Wales feels more for you than I do or feels the loss of your husband more. As President of a new College, if it had not been for the charm of Mr. Jones's character, my position would have been a very difficult one.

Yours very sincerely,  
TREDEGAR.

There are few men I trusted more and liked better.

BISHOP HEDLEY.<sup>2</sup>

There was no one like him when one was dispirited and wanted encouragement. Those last times that we met in London are good to remember now.

W. P. KER.

His friend, Professor Vaughan, said of him that he was :

Wisest in counsel, most persuasive in speech of all the men of anything like his age whom I have known, always frank and

<sup>1</sup> But he was pronounced fit to return to work under limitations.

<sup>2</sup> The Roman Catholic Bishop of Newport and Menevia.



loyal in friendship, always generous and considerate in his dealings with others. . . . His abilities were most unusual both in degree and kind. . . . There were few subjects in which his knowledge was not remarkable, and none in which his judgment was not exceptionally quick.

Never did he languidly touch a subject with the tips of his fingers. Never was he only partly roused. His mind, his heart, his whole vigour, he gave to every discussion. Awake to everything, he gave to everything the concentrated attention and devotion of one of the most highly trained, piercing yet most painstaking minds.

ELLIS EDWARDS.

I knew your husband comparatively slightly. We had met only four or five times. But even the little I had seen of him had inspired me with so deep and sincere a regard and respect for him that his departure is a personal grief, the loss of a valued friend.

He had done much for Wales, which he loved, and his death is an unspeakable loss to his people and to the cause of education.

JAMES BRYCE.

No weaker word than *love* can express the feeling he inspired in all those who had the privilege of working with him. It was not merely his great intellect and his inspiring courage and lofty ideals, but his extraordinary *charm* and individuality which made one think of him as apart from ordinary lives.

I can never say how good he was to me, how it was a real pleasure to sit in the same room with him. Perhaps one of the days that comes back to me most vividly is a quiet meeting at your house, when he read Browning to us, with a depth and tenderness which put new meaning into each phrase. How impossible it is to think of him and Death together—it can only be that he has passed into more fulness of light and life. . . . He has been given to the Nation's service as literally as if he had laid down his life in battle.

MARGARET VERNEY.

Looking back to their long association in work Sir Harry Reichel said :

He was an academic statesman of the first order, possessing the rich imagination that could body forth far-reaching plans of development, and at the same time a sympathetic insight into contemporary life and needs that enabled him to discriminate unerringly between the possible and the impossible. Imaginative in the highest degree, he was never fanciful. Hence, though

the boldness of his conceptions often startled one at the outset, maturer reflection showed that there was nothing utopian about them, that they had organic connection with existing facts, and could grow out of them.

His powers were peculiarly adapted for the exercise of formative influence at a critical moment. He entered on his work at Cardiff just at the beginning of a period of educational expansion which for rapidity and completeness had been pronounced by a high authority to be without parallel in the history of Europe. He brought to the direction of this movement not only an intellect of unusual keenness and power tempered to the highest point by dialectic intercourse with the most brilliant men of a college then renowned above all others for intellectual distinction, but also remarkable versatility of mind and along with it insight and sympathy. Professedly only a mathematician and physicist, there was no subject of University study in which he did not take an active interest. To hear him discussing a metaphysical problem was a treat. He had a literary faculty and gift of expression that was the admiration and often the despair of men who had made literature their study. This showed itself chiefly in debate, and, taken along with a delicacy of perception that seemed to tell him as if by instinct what was in other people's minds, was no doubt the secret of his extraordinary persuasiveness.

. . . . I cannot resist the inclination to tell you how greatly I sorrow for the death of your husband. His removal has been a loss to the cause of education and a check to the progress of science.

I know of no man whom I have loved so greatly after such a brief acquaintance. His wisdom, his powers of conciliation, his invariable courtesy could not but deeply impress even those who were rarely brought into contact with him.

E. H. GRIFFITHS.

Mr. James Walker, who was his colleague as Examiner for the National Science Schools at Oxford, wrote of him :

My feelings for him ripened into a deep affection, such that his death has left a sad blank in my life. I often derive help and encouragement from the remembrance of him and his illuminating and stimulating discourse : ' as iron sharpeneth iron, so a man sharpeneth the countenance of his friend.' Often he urged me to write a book on ' Physical Optics,' then broke off, saying, ' But, after all, you and I at our age ought to advance science, not to write books.' He often lamented to me that his duties as Principal took so much time from that cherished pursuit.

Sir Alfred Wills, writing in 1901, said :

For myself, I love to think of our long years of close and uninterrupted friendship—of an intercourse which was a source of great and constant pleasure to us both—of the respect and affection we had for one another and of the way in which each of us never failed to interest the other.

One of his junior colleagues wrote :

I got to know him on the University Court and the Central Welsh Board. It was then I really came to understand his power over those who worked with him. I repeatedly observed his attitude and methods in the deliberations of these bodies. Some question would be started—speaker after speaker would get up, and as a rule the discussion made the problem more and more tangled. Over and over again in such circumstances I observed the Principal writing thoughtfully on a small sheet of paper, and then, when the tangle of discussion was at its worst, he would rise and suggest the resolution which he had been drafting—and that always cleared the issue. Therein lay his great power : his unfailing insight into the true bearings of a difficult question and his genius for devising just the right solution.

Those of us whose duties have lain in following the course of the educational movement, know that your husband's work has been that of a master-builder in national education. I shall always think of him as one of the architects in the early middle ages who put their lives into the creation of some great cathedral which embodied high aspirations and served as a centre of spiritual and intellectual life.

In the years since 1882 or thereabouts much of the noblest and most lasting work has been done—not in education only, but especially in education—by men who have translated their ideals into great corporate institutions, building up, designing, adjusting, enlarging, but all the time interpreting their work in one long effort of intense and artistic creation, guided by facts and yet (in many ways) mastering the facts and out of all kinds of recalcitrant materials creating an institution great on its merely material side but infinitely greater in its spiritual and corporal aspect.

But the real vitality and influence of any institution seem in some mysterious way to depend on there being some great act of self-sacrifice enacted in behalf of it—some outpouring of life and strength and intense faith as a sort of blessing on its work. Happily all who love the work remember this greatest gift

long after much else, which seemed at the time more important, is forgotten.

MICHAEL SADLER.

The affection of family and friends was dear to Viriamu.

In a letter to a friend who had just lost his father Viriamu Jones wrote :

I can understand the sorrow it must be to you. The preparation for such a blow given by even a prolonged illness does only a little to make one bear it better.

So great a power of active sympathy disappears when the end comes—a sympathy which illness has often rather intensified than diminished.

Speaking of Tom Ellis on his death, Viriamu said that, when the news was announced, the whole field of public life became to him as a sunless landscape, grey and cold, so sunny was the whole nature of the man :

We loved him and loved to be with him. We have lost his living presence, but his ideas and the memory of his life remain and will remain with us as an abiding stimulus. His belief in his country's future, his faith in the character of his people, his devotion to his country's service, his high example in every relation of life—these things remain ; and they will I believe be to many succeeding generations a great and inspiring tradition. Upon no part of the country would the loss fall more heavily than upon those educational institutions which he helped so largely to create.

Though all his colleagues and fellow-workers were most unselfish and chivalrous in the help they gave, it was hardly possible that all communications should cease, and all through the last fatal year the correspondence in relation to his work continued. Unfortunately, too, in other ways all efforts to secure for him the rest of mind so wisely advised by Mr. Rathbone were baffled.

After he left England, it was six months before his mind was able so to free itself from its accustomed preoccupations as to enjoy the sights and sounds of nature. Once, and once only, he spoke of the hard trial to him of having to give up work, loyally setting himself to enjoy all the resources



of life within the prescribed restrictions. Drawing and sketching were now a delightful occupation, and, while still confined to bed, he drew a portrait of himself, or rather a map of his countenance with every line drawn in and no softening of light and shade, so that when finished it suggested his father's face at the age of sixty. Here his scientific habits clung to him ; he would go to his subject and measure length of nose or height of forehead to ensure correctness of proportion.

Both Viriamu and his wife grew to love Geneva, the old city, the Treille where one could sit out of doors as soon as the spring sun began to shine, the great mountains and the beautiful country lying between them and the lake, their own, pleasant, sunny rooms looking over the lake, and the quiet life free of interruptions. At Christmas came Professor Ayrton, and never were two friends happier. Merriment and fun reigned ; illness was banished into the background ; all was gaiety, affection, and hope. Later, as a delightful surprise, came the visit of Mrs. Yeo and her two young people ; and for several months there was pleasure as well as comfort from the presence of the French nurse—till then a cook,—an intelligent, vigorous woman, ready to learn, and adapted for her new calling.

When the summer came he and his wife went to stay in a farmhouse outside Geneva, there to enjoy their first and only six weeks of country life together ; the quiet and the beauty of this retreat seemed at first to bring healing and rest. A few paces from the windows of their parlour, across an orchard, the lake was in sight ; beyond it rose the Salève, and above the Salève, when the sky was clear, Mont Blanc was visible. In the morning they breakfasted under the cherry trees, laden with fruit, and the ducks and other farm creatures bold enough to venture near for dainty morsels were a source of great amusement to Viriamu. There, too, he began to find pleasure in using his hands as a craftsman, and to stroll in full enjoyment of the summer landscape of corn and vineyards, stretching towards the Jura and Alps. There was hope of returning health, though no day passed without hints of the old pain.

In spite of these warnings, and of his own sense of physical unfitness, he was pronounced fit to resume his work. On reaching London, he was so unwell that it seemed wise to get quickly to his home. There on the first night the old pain returned. It was impossible to follow the doctors' prescribed régime, he was in honour bound to work, and his heart was set on resuming his personal relations with his students. The spirit, still intent on serving, unaware of warnings from the frail, broken body, was absorbed in this full life. As he wrote to his sister :

*Dec. 21, 1900.*—It is the last day of term—and to-morrow we start for Surrey. I am the better, not the worse for my term's work—and am very glad that after my long inutility I have been useful to the College this term—if never before. For I have managed to change the opinion of the Corporation, and induced them to give a site of five acres to the College for the new buildings instead of selling it, as they intended at my return to do. I am very proud of them for being willing to change their minds at the bidding of reason.

Four days later he had to be taken to London for special medical treatment. But his last speech at Cardiff, so brilliant, and, in its result, so successful, was taken as proof that his condition could not be dangerous, and, indeed, his spirit never shone more clearly.

In spite of eleven weeks spent for the most part in bed, losing strength by a series of relapses, he was advised that after a little change to the country he might go back to Cardiff and work for a few hours daily. He made a short visit in the country on the way.

Not long before the end he stayed with us for a little while in our country home {wrote a friend}, the same clear-seeing, alert, and altogether delightful comrade, so hopeful that he even discussed the purchase of a permanent *pied-à-terre* within a stone's throw of us. His cheerfulness communicated confidence when things were all but desperate, and what his friends remember best of him, is not how much he suffered, but what a good fight he made of it. This is as he would have it.

Once more at home he lay in bed, rarely without pain, giving love and sunshine to everyone in his great and growing weakness. As he lay there, close to the site

on which was to be built the new College, to the design of which he had given so much time and thought, his bed was piled with books on architecture, and he must needs ask to see the president, Lord Tredegar, to talk over the plans with him.

In the afternoons he found pleasure in looking at Roberts' picture of Egypt, re-living the holiday he had so much enjoyed, and in hearing parts of Lord Derby's translation of the *Iliad*.

In May, though doubt could no longer exist as to his hopeless condition, he was advised to go to Switzerland for mountain air. The College Council sent their last kind messages, giving him indefinite leave of absence, but begging him not to resign.

Obedient to medical advice, he set out with his wife, his brother Brynmôr accompanying them as far as Paris.

Books were packed for the long summer and winter sojourn, and they went to a little country house three miles out of Geneva. As the train reached the spurs of the mountains at Bellegarde, he got out to breathe the sharp, keen air, saying : ' Ah, this gives me new life.'

Ten days later, on Sunday, June 1, 1901, on such a cloudless summer's noon as he would have rejoiced in, the end came.

Alpha and Omega, sadness and mirth,  
 The springing music, and its wasting breath—  
 The fairest things in life are Death and Birth,  
 And of these two the fairer thing is Death.  
 Mystical twins of Time inseparable,  
 The younger hath the holier array,  
 And hath the awfuller sway :  
 It is the falling star that trails the light,  
 It is the breaking wave that hath the might,  
 The passing shower that rainbows maniple.  
 Is it not so, O thou down-stricken Day,  
 That draw'st thy splendours round thee in thy fall ?

Till Time, the hidden root of change, updries,  
 Are Birth and Death inseparable on earth ;  
 For they are twain yet one, and Death is Birth.

The many speeches to his memory, the letters flowing in from every side, including one from the King, and one from his piano-tuner, who not knowing him yet proffered his sympathy 'at this very sorrowful time,' all proved how the work of the Principal was appreciated, how the man was loved. It was as if the people of Wales could not do enough to show their affection for him, and their gratitude.

On June 7, a perfect summer day, men and women from all parts of Wales, friends and colleagues, his students past and present assembled in the Park Hall at Cardiff to honour his memory. With the officers, staff, and members of the College came the Bishop of Llandaff, clergy and ministers of all denominations.

Through the hushed streets of the town, in strange contrast to the noisy traffic of other Saturdays, the long procession wended its way, the van bright with the mounted escort and the glittering firemen's helmets; the rear sombre with the girl students in their black caps and gowns.

As the long train of carriages paused in the streets of Swansea, his youngest brother Morlais heard a workman ask his mate, 'Who's this we're waitin' for?' 'Don't you know?' was the answer. 'It's him as cared for *us*.'

High up on the hill, overlooking Swansea Bay, he was laid by his father's side—the man who in a short time fulfilled a long time, dying at the age of forty-five.

His statue in the hall of the new College bears this inscription :

This statue was erected by his friends in memory of his wise, unwearied spirit, and of a life devoted to the service of his country.



## TO CAMBRIA, 1901

All thy sons but one are faint with mourning—  
 He, thy greatest falls, his labours o'er ;  
 He who battled for his poorer brethren,  
 Seeking their salvation evermore.

Seeking precious founts of priceless learning  
 (Rivers ever widening to the Day),  
 At the cry of Cambria's eager children  
 To their lips to bring, their thirst to stay.

Hope for those that pined far from the water,  
 Light for those that knew not well the road,  
 Cheer for those who, marching, paused toil weary,  
 Help for those who helped their brethren's load.

By the flowers of fame his hearse adorning,  
 By the name that benediction bears,  
 By the work for which his life was given,  
 By thy deep affliction and thy tears.

In the Temple that he gloried building,  
 Wherein ye his costly labours see,  
 Build ye, Cambria ! build, all lands beholding,  
 Surely, and for all Eternity.

ALICE WILLS.



# APPENDICES

## APPENDIX TO CHAPTER II

ADDRESS ON THE OCCASION OF THE REOPENING OF FIRTH  
COLLEGE, OCTOBER 4, 1881

AFTER it was arranged that I should deliver the opening address, I gave much thought to the determination of its subject, and for some time I halted between two opinions, having the desire to speak on some scientific subject and at the same time feeling it might be more useful to endeavour to state as definitely as I could what work such an institution as this could and ought to do, in what direction it ought to develop, what hopes I had for its future, and what difficulties I feared might check their realisation.

And in the end I judged that the second course would be the better, because in the first place I hope to have many other opportunities of drawing your attention to scientific topics, and in the second place it seemed more appropriate at this beginning of my work amongst you. I shall endeavour to-night to deal practically with a subject that could not fail to be of the greatest interest as well to you as to me. I shall try to tell you how I think this College can assist Sheffield in its educational advance and help and hasten its intellectual development.

But first I wish to point out that it is very important to feel deeply the need of such intellectual development, and for two reasons :

- (1) Because if we do not we are out of harmony with the spirit of the time ; and
- (2) Because without this feeling of need no great intellectual progress will be possible.

To take up the first reason : We live in an age of education. Never in the history of the country has there been such anxiety that none shall be exempted from its elevating influence. From being the monopoly of priests it became the luxury of the rich, and from being the luxury of the rich it is fast becoming the common property of all, so that there are almost none now who may not share to some extent in the inestimable advantages it confers on its possessors. No one, not even the leader of a popular

insurrection, would any longer say to another, as Jack Cade did to Lord Say in *Henry VI.*: 'Thou hast most traitorously corrupted the youth of the realm in erecting a grammar-school. . . . It will be proved to thy face that thou hast men about thee that usually talk of a noun and a verb, and such abominable words as no Christian ear can endure to hear.' Such sentiments are no longer felt, certainly are no longer uttered by any in this country. Rather do we listen to Lord Brougham in a sentence which, after he made it, became a watchword at parliamentary elections: 'Let the soldier be abroad if he will; he can do nothing in this age. There is another personage, a person less imposing in the eyes of some, perhaps insignificant—the schoolmaster is abroad, and I trust to him armed with his primer against the soldier in full military array.'

The sentence is truer now than when Lord Brougham spoke it. The nineteenth century, and more especially the last few years, have seen great progress in what may be called educational machinery in this country. By the Education Act of 1870 no child in all the land is left without the key with which, if he will, he may unlock the portal of the treasure house of human thought and take possession of a rich reward.

The old Universities tremble with new life. They have been dipped in the cauldron of Medea and are young again. I hope the success of the newest immersion may be commensurate with the time occupied in the process. University College, London; King's College, London; the Owen's College, Manchester; the Yorkshire College of Science at Leeds; University College, Bristol; Firth College, Sheffield; and other newer kindred institutions—all these are the children of this great educational movement.

Wales has felt it too, and the report of the Committee of the Privy Council recently issued is such as to make one expect a great advance in intermediate and higher education in the Principality. I think I need say no more to justify the statement that the age in which we live is an age of education. I will go further and say that this is the best that could be said of it. It is not an age of peace: there are wars and rumours of wars. It is not an age of faith: authority is being questioned on all hands, and the traditions, even the foundations, of the Churches are being examined with a touch something less than reverent. But it is an age of intellectual development and the diffusion of knowledge. It is an age of education; and however much we may be out of sympathy with its hurried rush to found large conclusions on the natural knowledge we have acquired, yet it is our duty to sympathise and be in harmony with it in its desire to propagate that and other knowledge among the people. This, then, is the first reason why we ought all to feel deeply the need of intellectual development, because if we do not we are out of harmony with the best side of the spirit of the age in which we live.

The second reason is that without this feeling of need great intellectual progress in an individual, a town, or a nation is impossible. To take an illustration from a higher region, it is an old doctrine that consciousness of sin must precede spiritual regeneration. It is



an exact analogy that consciousness of ignorance must precede intellectual regeneration. If you realise your need you are not far from entering into the Kingdom of Knowledge. And when England began to realise the need of education, began to see that it must not prodigally waste its intellectual resources, and that by cultivation it might reap a rich intellectual harvest, then did that movement towards a more efficient educational system begin which has already done much for this country.

I wish to-night to consider one aspect of this movement—the rapid growth of such colleges as this in the great provincial towns of England. Such institutions are likely in the future to play no unimportant part in the education of this country, and it is very necessary to find out what they could do for the towns and districts in which they are founded.

I wish to state distinctly the aims of the Firth College: it is very important that they should be understood by the people of Sheffield. I do not pretend that at present you could do all I shall indicate, but I desire that the lines along which they should develop—and I hope quickly—should be apparent to you. It is important to have a standard, and a high one, in front of you. It will prevent you from being content with small results; it will make you press forward with more earnestness, and will encourage you to persevere in time of difficulty.

I will describe the work we should endeavour to do and class it under three heads:

- (1) University work.
- (2) Technical work.
- (3) Popular work.

To deal first with the functions of a University, a complete University should:

- (1) Teach.
- (2) Examine, granting its degrees and diplomas to successful candidates; and
- (3) Encourage original investigation in all branches of knowledge.

Taking these functions in their order, we shall see that:

- (1) University teaching differs from the teaching of a school in two respects. It leaves the student freer and more independent, and he specialises more, his work is not so broad, but more than proportionately deep.
- (2) The examining functions of a University also serve a twofold purpose. They are means whereby the University picks out those deserving the stamp of its approval; and, secondly, properly constituted examinations are a guide to the student through the intricate labyrinth of his studies.
- (3) The third function of a University—the encouragement of original investigation in all branches of knowledge—is carried out by its libraries, its laboratories, the guidance of its professors, and by the endowment of research.

Coming to the practical question, 'What part of this work can Firth College hope to perform?' It is definitely part of the duty of the College to perform the teaching function of a University in Sheffield. To what extent this is done at present

you will see from the prospectus. All branches of knowledge are not, as yet, represented. At present teaching is offered in Mathematics, Classics, Natural Science (excluding, I am sorry to say, Biology), Modern Languages, and last, but by no means least in importance, English Literature. In regard to other subjects, I think I can safely say that if there is any sufficient demand on the part of the students for teaching in any subject not mentioned in the prospectus, that teaching will not be long delayed. I am sorry that the last report did not indicate a greater demand for this University teaching. I can only attribute this lack of interest to want of knowledge of what the aim of the College really is. To perform the teaching function of a University is a very important part of the work it has to do. The second function—that of examination—we cannot undertake. A charter enabling us to grant degrees will not come yet; but in this matter the University of London, which is purely an examining body, ready to receive all comers, men and women, will do the work sufficiently well for us. Its examiners will guide our work, and success in them would confer on us that customary mark of distinction—a University degree. Lastly, in regard to the third function of a University—the encouragement of original investigation in all branches of knowledge—something even in this branch might be done by Firth College, though I do not pretend that this function of a University can be discharged with anything like the completeness of the first—University teaching. Universities should encourage the prosecution of original investigation :

- (1) By Libraries.
- (2) By Laboratories.
- (3) By guidance from Professors ; and
- (4) By endowment.

Now it is a solemn thing to have to say, but with the exception of some dozen volumes there is no library in the College. I think it is very necessary to mention this, because contributions towards a library in the shape of valuable books are very possible, and I think probable if the need of them is understood. As regards the rest, perhaps I may be permitted to say that Professor Carnelley has already made the Chemical laboratory of the College widely known by his investigations, and I hope the time is not distant when he will find himself not alone in his researches—when he may see around him students whom he has trained, actively engaged in trying to wrest from Nature the secret that coy lady does not reveal except after most patient and pertinacious questioning. To sum up, Firth College, while relying on the London University for its examinations, will perform the teaching functions of a University, and to some extent will be able to encourage original investigation. The question naturally arises, To whom in Sheffield will this be useful ? A more natural question still is, To whom in Sheffield will this not be useful ? I hope it will be useful to very many of the young men of Sheffield who leave school at the age of sixteen or seventeen, and who, though intending to become men of business, yet are able to spare some time for the further cultivation of their intellectual faculties before entering on the special work of their life.

I know that it is the opinion of many that if a man is to go into business it is better for him to begin young, at fourteen or fifteen. This is a mistaken opinion, and I trust it is rapidly becoming obsolete. It is of immense advantage to every man, to business men as well as to others, to have a mind well stored with the best that has been written and said. I wish to be frank. I do not say that it will make them much more capable of amassing wealth, though that is possible. But ever after they will be finer men. It has been well said that 'they are never alone that are accompanied by noble thoughts.' Further I will add this: 'We know what we are, but we know not what we may become.' Many in days of prosperity have regretted that theirs was not the education to make them capable of tasting its sweets to the full. My advice is, prepare for great things. Such advantages as your fathers never knew are within the reach of many in Sheffield, through the noble generosity of the founder of this College that has been left orphaned by his lamentable death. I trust you will profit by these advantages. I hope I may see Sheffield, to use the words of Milton in his tract on education 'enflamed with the study of learning and the admiration of virtue, stirred up with high hopes of living to be brave men and worthy patriots, dear to God, and famous to all ages.'

Coming to the second head of my address—technical work—the College must provide a department of applied science and technology for students who wish for a systematic training in the scientific principles on which manufacturing processes depend. A technical education may be distinguished from the University education of which I have already spoken by the difference of the objects in view. General culture is the object of the latter, that of the former is to prepare the student for some particular art or manufacture to which he intends devoting himself. But it need not be narrow on that account. A thorough technical course includes a great deal of preliminary scientific work before the application of it to the particular object in view is attainable. I am of opinion that the importance of technical education in a town like Sheffield cannot be overestimated, and I regard it as a most important department of the work of the College. In the Prospectus for the Session not nearly as much is made of it as I could wish, and not nearly as much as I hope and believe you will have in the future. Professor Carnelley will give a technological course on the principles of electro-plating, and the chemical laboratory is admirably fitted up for training students in technological chemistry. But I hope soon to see much more than this.

I hope to have a School of Engineering: no place is better adapted for such a school than Sheffield; and, further, I look forward to the time when we shall be able to supply extensive metallurgical teaching. I anticipate, as the result of the extension of technical education, an increase of inventive power and originality. A scientific insight into the processes used in the various manufactures of Sheffield will stimulate the mind and brace it to original efforts. I have heard a great deal about 'rule of thumb' and 'practical men.' I do not despise 'rule of thumb,' it is good in default of a better; neither am I wanting in respect for practical

men, but they would be twice as practical if they were theoretical too. The rapid advance in the science of electricity is due to an excellent combination of the theoretic and practical knowledge in those who cultivate it. Such an advance in the manufactures of this town may be safely predicted if this union of theory and practice can be brought about for them also—if the light of science can be thrown on them by the manufacturers themselves.

I repeat that scientific and technical education will encourage originality and give a spur to invention. Ignorance is tenacious of precedent: looks at new processes and will have none of them, shakes its head, mutters something about a frying-pan and a fire, and turns away protesting to work in the old fashion. But knowledge, fertile in suggestion, foreseeing distinctly the effect of an alteration, capable of dealing with new cases, is ever ready to improve. This is the great reason for technical education. This is why it is so important for this country not to fall behind others in this respect. This is why Sheffield must take care to be in the van of progress here. If the position as a manufacturing centre which this town has taken up is to be maintained in the future, it is absolutely essential—and I say this with a firm conviction that I am right—that some steps should be taken to provide thorough technical instruction both to its future employers and to its artisans, and I regard it as part of the work that the College has to do.

The third department of the work of the College is its popular work. It ought to provide lectures of interest to all sections of the community. This is not for regular students, but for those who cannot on account of their work afford the time for a University training or technical education.

In connection with the popular work of the College, I should not like to omit mentioning the Cambridge University Extension movement. This has played a great part in many towns in rousing an interest in and creating a demand for higher education. I think I am not wrong in saying that had not this movement paved the way Firth College would not have been built. The most important feature of the method of teaching adopted in the University Extension plan is the combination of popular lectures with more thorough work in the classes held after them. The need of this combination in the same course of lectures becomes less when, by the foundation of a College such as this, University teaching, the very work that the classes were intended to perform, can be much more efficiently and thoroughly performed in the regular college courses. Accordingly, in the future, you may look for a complete separation of the popular work and a stricter University teaching, but I am of opinion that this should come about not at once, but gradually. To sum up, Firth College must:

- (1) Perform the teaching functions of a University.
- (2) It must encourage original research in the town.
- (3) It must develop into a technical institute, giving chief attention to the special needs of the district.
- (4) It must provide popular teaching to interest the community at large in literary and scientific subjects.

This is the work it ought to do, and along these lines it ought



to develop. It is as yet miniature and cannot at present do all I have indicated. An acorn planted in the ground is not at once a goodly oak. And as with acorns, so with colleges. It must take time to grow, and we must not be disheartened if the progress is slow.

I have been told that this great town is in no advanced state of intellectual growth; that its 300,000 people scarcely need Firth College; that there is no demand for education beyond that which is given at the schools, and that whatever is more than this, is regarded as useless and unnecessary, not conducive to success in life nor worth the years of work that would be spent in its acquisition. But I hope that things are quite different. I turn for comfort to a book I hold in my hand, a 'History of the County of York' by Thomas Allen, published in the year of the foundation of the British Association, 1831, in which it is stated: 'The highly commendable zeal with which all subjects connected with science and literature are pursued in Sheffield is most exemplary, and certainly different from any town in the kingdom.' Sheffield, I trust, will not be unworthy of the traditions of its ancestors; and I ask you to believe that I come before you to-night not merely as a maker of a plan, but as a prophet inspired by the spirit of the time, declaring that it will be surely carried out.

## APPENDIX TO CHAPTER III

### A WELSH SCHOLAR

*(Evidence given before the Departmental Committee of 1880)*

ONE remarkable instance of struggles young Welshmen had to undertake to get education in the 'fifties.

The boy in question, the son of 'poor but honest parents' left the small national school of his native village when he was  $12\frac{1}{2}$  years of age and then followed his father's occupation of shoemaking until he was  $16\frac{1}{2}$  years of age. After thus working hard at his trade for four years, he and his brother and two fellow apprentices formed themselves into a sort of club to learn Welsh shorthand, the whole matter being kept a profound secret. They had no teacher, they met at the gasworks, sitting opposite the retorts on a bench supported by bricks. They did not penetrate far into the mysteries of Welsh shorthand, but abandoned the attempt and induced the village schoolmaster to open a night school. This did not last long. The young Crispin was returning late from Llanrwst one night with a lad of the same age, and both having heard of the blessings of education from a Scotch lady, who took a kindly interest in them, their ambition was inflamed and they entered into a solemn compact that they would henceforth devote themselves body and soul to the attainment of an academical degree. They were both poor, one a

shoemaker's apprentice, the other a pupil teacher, earning but a miserable weekly pittance: one could name the parts of speech, the other could not; one had struggled with the *pons asinorum*, the other had never seen it. . . .

After returning from Llanrwst, the little shoemaker disburdened his heart to his mother, and told her that shoemaking, which until now he had pursued with extraordinary zest, could no longer interest him. She was equal to the emergency, and sent her boy to a pedagogue of the old school who had himself worked his way up from the plough. Three days a week were to be devoted to school, the other three to shoemaking. This suited him admirably. That very night he seized a geography and began to learn the counties of England and Wales. From that day, I am told, the fear of failure never left him for two hours together, except when he was asleep. The plan of work was strictly kept, though by this time shoemaking had lost all its charms. He next shortened his sleeping hours—rose at any moment that he woke—at 2, 3, or 4 in the morning. He got his brother, who had been plodding over shorthand with him, to study horticulture and fruit and vegetable culture, and that brother subsequently took a high place in one of the Royal Horticultural Society's examinations.

Thus they once more worked together, and many a time their mother got up at four o'clock in the depth of winter to light their fire, returning to bed after calling them up. Even this did not satisfy their devouring ambition. There was a bed in the workshop and they obtained permission to sleep there. There they followed their own plans. The gardener would sit up to one or two a.m. and then wake his brother, who would return to bed again as soon as he gave up work. He studied through the small hours of the morning and worked at boots or went to school after the distant 8 o'clock had come. His brother got worn out. Early sleep seemed to be the best. They both went to sleep at eight o'clock and got a policeman to call them before retiring himself. So the struggle went on till the faithful old schoolmaster thought his pupil might try the admission examination of Bangor Normal College.

He was now eighteen years old, and it was eighteen months from the time he began to learn the counties of England and Wales.

He went to Bangor, rigged out in his brother's coat and waistcoat, which were better than his own, and with his brother's watch in his pocket to help him to time himself in his examination. He returned home convinced of his failure; and, by the help of a friend and a certificate he had won six months previously (a year after he had entered the school) in an examination of a Society of Arts and Science in Liverpool, he was appointed teacher in a school at Ormskirk.

Eight days after his arrival he heard from the principal (Mr. Rowlands) of the Bangor Normal College that he had passed head of the list and the highest non-pupil teacher examined by the British and Foreign Society. Having obtained permission from the master to leave, he packed his clothes and few books sadly. He had not enough money to get home, but unasked, the master of the school gave him ten shillings.

He arrived about three o'clock on a Sunday morning, after a walk home of eleven miles along a lonely road from the place where the train stopped. He reeled on the way and found the country reeling too. He had slept for eight nights in a damp bed. Six weeks of the Bangor Session passed, and during that time he had been delirious and too weak to sit up. But he got to the College as soon as possible, won his 'position,' which was all important to him, and kept it all through. Having finished his course there he went to keep a school at Brynaman and tried to study, but failed. After two years he gave up the school. He had saved £60, and after paying for the clothes he wore at College, he made a fresh start, and faced the world once more, competing for a Scholarship of £40 a year for three years at one of the Scotch Universities. He knew the Latin Grammar, and had with help translated half of one of the books of Cæsar; of Greek he knew nothing but the letters and the first declension of nouns; but in May he set to work in real earnest at a farmhouse and worked hard daily from 6 a.m. till 12 p.m., with only an hour's intermission. He read the six Latin and two Greek books prescribed—unaided, did some Latin composition, brushed up his mathematics, and learned a history of Greece and Rome. In October, after five months of hard work, he sat for the scholarship and got it, beating his opponent by 28 marks in 1000.

He then went up to the Scotch University, and passed all the examinations for his ordinary M.A. in two years and a half.

On his first arrival at the University he found that he could not sleep, but he plodded on wearily, took a prize in Greek, then the first prize in philosophy, second prize in logic, the medal in English literature, and a few other prizes. He had £40 when he first arrived in Scotland, and that sum he carried away with him to Germany, where he studied for honours in philosophy. He returned home with 2s. 6d. in his pocket, borrowed money to go to Scotland, sat for honours and a scholarship. He got his first honours and, what was more, money to go on. He now lives on the scholarship which he took at that time, is an Assistant Professor, and will shortly begin a course of lectures for ladies in connection with his University. Writing a few days ago he says:

'My health, broken down with my last struggle, is quite restored and I live with the hope of working on. Many have worked more constantly, but few have worked more intensely; I have found kindness on every hand always, but had I failed in a single instance I should have met with entire bankruptcy. The failure would have been ruinous. . . . I thank God for the struggle, but would not like to see a dog try it again. There are scores of lads in Wales who would creep up, but they cannot. Poverty has too heavy a hand for them.'

## APPENDIX TO CHAPTER VII

## OPENING OF THE NEWTOWN INTERMEDIATE SCHOOLS,

July 23, 1898

PRINCIPAL VIRIAMU JONES said : ' I thank you for the presentation. I feel that a very high honour has been done me in that you have asked me to open this new school ; and in declaring it open I express the hope, which I am sure is shared by everyone here, that the schools may continue to have an increased measure of the success and prosperity which they have already met with since their opening.

On the return from formally opening the schools, Principal Viriamu Jones said : ' I have opened the door of the schools with the beautiful key which the Governing body has presented to me. I shall always treasure the key, and the function that I have performed at Newtown this afternoon will always be among my happiest recollections. When you did me the honour to ask me to come to Newtown to-day, I felt that I could not refuse, though there were reasons why I wished to be away from England at this time. But I could not refuse for three reasons. In the first place, a deep sense of the honour that you were doing me in asking me to perform this very important function in the history of your town. In the second place, the extraordinary interest of the occasion. The Chairman has referred to the fact that England, I think we might say the world farther afield, is looking with close interest at the development of our educational system in Wales, and especially our system of secondary education. But it is looking with interest because of such a school as we are opening in Newtown to-day rather than because of the schools that will be opened in the larger centres of population. I remember Mr. Bruce—to whom we owe so much in respect of the development of our system of secondary education—remarking when he was speaking to me some time ago about the school to be opened in Cardiff, that the real interest is the numerous small schools that are to be dotted over the length and breadth of the Principality. Can we make these schools successful ? We are going to be put on our trial. Can we breathe life, animation, activity into them ? The world is watching us. We shall no longer have—if we do not make the best use of them—an excuse for backwardness. The third reason why I felt that I could not refuse, was that hitherto the destiny of at least the Girls' School here has been put into the hands of distinguished former students of the University College, Cardiff.

' I hope it may not be uninteresting if on such an occasion as this I ask a fundamental question. What is the object of a school ? What is the object of education ? What is the part the school is to play in education ? How may it best play its part ?

' Education means giving the children opportunity, guidance,



and a suitable environment for their free growth—for their free symmetrical growth—to a noble maturity.

‘Observe the words I have used—free growth. A child is not a piece of wood to be shaped by a carpenter. It is living organism to grow and grow freely. How commonplace! But how often we forget it. How often have we to be on our guard lest we put our children in strait waistcoats, check their original faculty, damp their natural ardour! I am not arguing against law and rules and discipline and strong guidance. By no means. But to every commandment and every law, beginning with the formula “Thou shalt not,” there is an implied conclusion “in order that thou mayest be free.” And the test of a good or a bad law is whether such a conclusion can be legitimately drawn from it or not. If, for instance, I take a familiar instance—if I say “Thou shalt not lie, what is the implied conclusion? The implied conclusion is “in order that you may be nobly free to trust one another.”

‘The limitation of action is really the conferring of freedom, and if we take any other view of the law we are guilty of the conclusion of the anarchist, who invokes the sacred name of freedom to destroy the law instead of invoking the law as a necessary condition of true freedom. Do not think when I say that we should be careful not to check the original growth of the child in our schools, that we must be careful not to put it in a strait waistcoat—do not think that I say we are not to lay down laws for guidance and better growth. What I do mean is that we ought to be ready—parents and masters—to make the child feel that there is good ground for restriction, to make it grow up with the feeling that we desire him or her to expand and grow in such direction as may seem best suited to its nature—that we may make a child free and not fretful with irksome restraint.

‘Taking that view of education—that it is an attempt on our part to supply guidance, stimulus, environment, in which it may freely grow to a noble maturity—how can we provide it by school curriculum?

‘We are committed in Wales to a system of day schools. That means that the parents and the masters jointly conduct the education of the child. Well, I would say to parents in passing: Remember that, and if there is disappointment, do not be too sure that the school is the cause of it. Make sure that your conscience is void of offence in the organisation of your home before being too ready to find fault with the organisation of the school.

‘But how can the school best provide for the education of the child for its free, symmetrical growth? Well, there is first of all the care of the body which in the words of the apostle is “reasonable service.” The body of an educated man or an educated woman should be—except in so far as absence of natural endowment may prevent it, so far as it is dependent on our own acts—it should be healthy, ready in action, the ready servant of the will, graceful in action. What can we do at the school to produce these most desirable results? The school can only provide for them partially. Health—if I had to write an educational treatise on health merely from the standpoint of education and what the schools can do, I think I should devote one chapter of it to gymnastics in the widest

sense, the organised training of the muscles, such as one has in common drill in the gymnasium, strictly so-called, in dancing and also the training of the adjustment of the eye and the hand, the training of readiness of eye and hand that one gets in games. There must be close adjustment of eye and hand and very careful training for success.

The second chapter would be on the bath, including under the bath, cleanliness, neatness, and in a general sense the cleanliness next to godliness. These would be two most important chapters. I must not stay to speak of them. The school is not responsible for the latter to the same extent. The home comes in in an important manner, but the school can do something. It should be spick and span, clean as the proverbial Dutch cottage. The children will try to make themselves worthy of the building in which they are taught. The absence of this cleanliness in the school, this delicate, remarkable cleanliness—I hope it will not be extraordinary in the schools of Wales, but remarkable—will produce undoubtedly carelessness in the children to such matters.

‘Turning from the training of the body to the training of the mind, from the growth of the body to the growth of the mind, what can the school do there? First, let us think of one particular aspect of the mind, the intellect. The children must be trained to reason soundly.

‘Now, what in the curriculum helps them most to grow in that direction? I think most emphatically the study of languages and mathematics, and I think that is the reason why these studies have played so great a part in the curriculum of secondary education in the past. Remember, I am not saying this should be the exclusive curriculum. I am dealing merely with the intellect, with the training of the children to reason soundly. And the reason is not far to seek, because language is the expression of thought, and mathematics is the first and simplest application of thought to nature. There you have it in a nutshell. That is the reason why, in training children to reason soundly, there is nothing like the study of language and the study of mathematics. But I need not dwell on that. There is no fear of these studies being neglected in our schools. They are obligatory, doubtless, in your curriculum.

‘But there is another aspect of the mind which has not received such attention in the Secondary Schools of the United Kingdom in the past as it has deserved—the cultivation, the training of the powers of observation. It is by observation that we arrive at the matter of knowledge, by our own observation or by the recorded observations of others. But I think I am not saying too much when I say that the observation of others will not have full meaning for us unless we have learned to observe for ourselves. Now how can we train our children to observe? How are we to give free play for the growth of their faculties of observation? In the first place, I think I must put drawing as that part of the school curriculum which exercises an important influence in that direction. I am sorry to say that I am myself a very poor draughtsman, but I remember twenty years ago in Guernsey sitting by an artist painting a bay. I said I wished I could draw it. He replied: “Why not try?” and he set me to work and I drew that bay.

I have never forgotten that bay. It is the only bay I ever drew, and although it is twenty years ago, I think I could reproduce it. Such is the effect of the endeavour to reproduce what is before one. That is the reason why drawing is of such exceeding importance in the school curriculum, and I hope it will not be neglected in this school.

' In the second place, there is manual training. That is not the endeavour to reproduce on paper the thing that one sees, but to reproduce in actuality the object presented. I know nothing so likely to make children observe the sizes and shapes of bodies as to set them to reproduce them. That is one reason why manual training is very important. That is one reason why we ought to be grateful to Principal Reichel for his missionary enterprise<sup>1</sup>—so I may call it—in endeavouring to convince us of its importance.

' In the third place, as an instrument of education in observation, we have the showing of works of art to the pupils in our schools. Now I have been very much impressed in going through your school with the provision which you have begun to make in that respect. I have been present at the opening of several schools, and I do not remember in any new school to have seen so good a collection of works of art upon its walls. Many of you will remember that the effect of which I am speaking—the effect of works of art upon the training of children to see and the training of us all to see, for many of us arrive at maturity without learning to see properly—has been finely put by Mr. Browning in one of his poems, "Fra Lippo Lippi." Fra Lippo Lippi, who is speaking, is apologising to people who are asking him to produce things that we do not see. He says :

We're made so that we love  
First when we see them painted, things  
    we have passed,  
Perhaps a hundred times nor cared to see ;  
And so they are better, painted, better to us,  
    which is the same thing.  
Art was given for that—  
God uses us to help each other so, lending  
    our minds out.

' This is what the artist does for us. He helps us to see things as they are. That is the reason why it is of such great importance that there should be an ample supply of works of art in our schools.

' There is another means of training the children in the methodical habit of observation, of giving their observing faculties full opportunity to grow, and that is by a study of natural history—by a study of the habits of plants and animals in the field. People are now-a-days too much taken up with the cutting up of animals and plants to see what they look like. There is a far more useful training in the school to be obtained by the teacher taking his class into the open air and making them observe what is going on. That, if we come to put it in force, will have an important influence in developing and giving free play to the growth of the observing faculties of our children.

' But that is not all. We may have a man healthy in body,

<sup>1</sup> Principal Reichel introduced the teaching of Sloyd into Wales.

with a body that is a ready servant of his will, graceful in action, incapable of fallacious reasoning, with cultivated faculties of observation, and yet he may be neither cultured nor good. For culture and goodness are dependent on the feelings and the will. Matthew Arnold told us—I think mistakenly—that to be cultured is to know the best things that have been written and said. (I am not quite sure that I am quoting his words correctly, but as I heard a man say recently, the more popular a quotation is, the more inaccurate.) I think he was mistaken. I do not think culture can be described as knowledge at all. To be cultured is to make sufficient and fine response to beautiful things and noble actions. It is the response of the whole nature of a man, face to face with such things and such actions. Of course it helps to know the best that has been written and said. It is in itself a cultivating influence, but the essence of it is not there. The essence of it is the cultivation of right feeling. And in its train there come ready sympathy and gentle courtesy. Can we provide for this influence by a school curriculum? In part I think you can. The singing of fine music, the reading of great literature, and the point I referred to under the previous head—the showing of great works of art—all these things help to give this culture of which I am speaking. I think that our children are so made that they will love beautiful things if they see and hear them, not ugly things. I think that they will respond to the record of great human lives and noble human achievement, and therefore I think that by the proper provision, as I have said, of works of art, fine music, great literature, which may be done by the curriculum to train the feelings of the children in this way—giving opportunity to their feelings to develop nobly, to grow finely, in this direction. But, of course, it is not wholly an affair of curriculum. It will depend far more upon the character, upon the life, of the teacher. It will depend upon his attitude to life, shown in a thousand ways and always making itself felt in the spiritual and moral atmosphere of the school.

‘There is one other thing to which I must refer before drawing this very lengthy catalogue to a close, and that is the training of the will. We must endeavour to make boys and girls in our schools self-controlled, and that means in the highest sense to have a strong will. What is weakness of will? Weakness of will is incapacity not to respond to a present stimulus. Something appears before the weak-willed man and it is like pulling a marionette string, his action is as if it were reflex, as if he were a puppet at the mercy of every present influence, incapable of not responding under any stimulus to action presented to him. The strong-willed man is just the opposite, and it is the opposite we must aim at in the education of our children. We must have men and women of strong will, self-reliant, firm, seeing vividly ideal conditions and feeling vividly that they are called upon under God’s guidance to do something to make these ideal conditions actual. Let me put it otherwise. Our children should be given the opportunity to grow up men and women, healthy in body, ready in action, graceful in action, of intellect so trained that they shall be incapable of reasoning falsely, with cultivated powers of observation, cultured feelings,



self-reliant, and of strong will. And if the school here does its duty—one must make these things concrete—if the people of Newtown give it the opportunity of doing its duty, some effect ought to be produced on the next generation. We ought progressively to see in Wales, in consequence of the establishment of these schools, a greater proportion of men and women who can be described in the words I have used. I have said we are on our trial; we shall be abundantly justified if this is the result of our work.

‘What has made the history of Wales during thirty years little else than a development of an educational system? The passionate desire for education in the hearts of the people. It is this that has given strength to the arms—to the voices—of our politicians. They have to struggle a good deal to get all that we get from the Government of the United Kingdom. What is it that has been the cause of this passionate desire for education? I think it took its origin in the spiritual revival of the last century, which developed in the hearts of the people, as a natural outcome of their devout spiritual life, a real reverence for knowledge: the reverence combined with the advent of the true democratic ideal has produced the passionate desire for educational reform which has characterised Wales during the last half century. I said true democratic ideal, the only democratic ideal worth knowing, because to have a stable form of democratic Government, the Government must be the outward and visible sign of an inward and spiritual grace. It is this passionate desire for education that will be brought forward by the historian as a reason to account for the remarkable progress in our educational history.’

## APPENDIX TO CHAPTER VIII

### THE UNIVERSITY OF WALES

By J. VIRIAMU JONES, M.A., B.SC., F.R.S.

THERE is safety, when addressing a Welsh National Society, in choosing an educational subject for the subject of discourse. This is true in Wales, and none the less true out of it; for no Welshmen are more ardently Welsh than many who live elsewhere than in the mother country.

It would be an interesting task to trace the origin of the devotion to things educational which has characterised the Welsh people during the past thirty-five years—a devotion ever increasing during that time. This devotion has doubtless been, in part, due to general causes simultaneously affecting other parts of the empire. Educational reform is a very natural result, for instance, of extension of the franchise. The historic connection between them is more than fortuitous. The Reform Bill of 1832 was promptly

followed by the first government grant to elementary education ; the Reform Bill of 1867 by the Education Act of 1870 ; the Reform Bill of 1884 by Free Education and the Technical Instruction Acts. Indeed political issues lead very straight to an educational moral.

We live in a democratic age. Equality of rights for all men, equality of opportunity for all men—these are the phrases of the platform, and they embody the tendency of our legislation. Side by side with these democratic ideas, or perhaps inside and interwoven with them, we have a universalisation of the idea of intellectual competence—the recognition that everyone has a right to have an opinion and to express it. But with this right, as with all others, there goes a corresponding responsibility. The growth of freedom is the growth of responsibility. There is no Cæsar to bear the burden of empire. The citizens of this country will be the makers of its progress ; they will, too, be the fathers of its mistakes. The destiny of this great empire is in their hands. How shall they play their part, discharge their responsibility, answer to this call, if each one has not trained intelligence ? Each one has a right to an opinion. Yes ! we gladly respond. But each has the corresponding duty to see that his opinion is a well-founded result of investigation and thought. From that duty he cannot escape ; and how shall he fulfil it adequately if his training be not such as to have equipped him intellectually for the task ?

We are led, then, to education as perhaps the chief problem of the time ; and to education not in the narrow sense—the education of the few, but in the widest sense—the education of all.

Such considerations as these, with many others that might be mentioned, have done much to arouse the community, as a whole, to a sense of the importance of educational reform and progress and have exercised a constraining and directing influence on the educational policy of our legislators.

But in Wales there have been, I think, certain special causes contributing to a warmer glow of educational aspiration. The religious revival of a hundred years ago was an awakening of national life. It developed a spiritual life that found a natural outcome in a real reverence for knowledge, a reverence that penetrated to the humblest homes ; and many and pathetic are the records of noble self-sacrifice on the part of Welsh parents to secure for their sons this gift of knowledge at a time when it was hard to reach, by reason of the absence of educational opportunity in their country. This reverence for knowledge, with the advent of a true democratic ideal—the only true democratic ideal—the ideal of a state in which all should be cultivated citizens—has given rise to an intense longing for intellectual opportunity, for the means of acquiring knowledge, for a complete educational system ; and so the history of Wales during the last twenty-five years has been little else than the history of its educational progress. Without an appreciation of these springs of action in our national life, it would be difficult to understand the hold which, in my experience, educational questions have on the people of Wales, and the feeling that finds expression when colliers and artisans give gladly the small sums they can afford—sums not small to them—for the establishment and de-

velopment of the Welsh colleges and for the maintenance of students of their class ; and when they influence their representatives on our County Councils to make large grants for educational purposes. These things warrant one in saying that, in respect of education, we are not merely aiming at a national life—we have begun to live it.

It is my purpose to-night to relate one chapter in the educational advance of Wales. The foundation of the University College of Wales, Aberystwyth, the work of the Departmental Committee of 1880, the foundation of the University Colleges of South Wales and Monmouthshire, and of North Wales, and the steps leading up to intermediate education legislation have been often told. My subject to-night is a still newer one—PRIFYSGOL CYMRU—the University of Wales. And I cannot, in the time at my disposal, go back to the period when the University was a vague and shadowy ideal in the minds of prophetic and patriotic men, the great men who laid the foundations of other institutions that have made it possible. I must restrict myself to an account of the movement which resulted in the practical scheme to which the Crown has given effect.

For this purpose I must take you back to an August morning in the year 1887, when the Cymmrodorion Section of the National Eisteddfod met in London to begin a three days' discussion on Welsh education. The main object of the address with which that discussion opened was to show how every part of the Welsh system of education—whether we considered elementary, intermediate, or higher education—stood in need of an organisation of a completing kind, binding together what was then more or less separate and individual educational work ; and that a properly constituted University of Wales would precisely provide this organisation, so necessary to give unity of purpose and consolidation of result to Welsh educational effort ; and that such a University was necessary, not merely to 'crown the educational edifice'—to use an oft-repeated phrase—but to introduce symmetry, order, and good arrangement to those parts of it already in existence. We could have put up for a time with an incomplete edifice ; we objected strongly to an untidy and disorderly one. I confess I do not think the architectural metaphor an appropriate one. I have used another that seems to me truer, taken from a department of science to which I have given some attention. Scatter iron filings on a sheet of cardboard, they will fall irregularly without trace of ordering. Bring a magnet beneath the cardboard, and they will arrange themselves in curves so harmonious and beautiful and mysterious that one never wearies of watching. 'That's the tale ; the application ?' The iron filings are the educational institutions of Wales ; and the University, if it plays its part aright, is the magnet that shall link them into orderly system.

In regard to elementary education, the paper to which I have referred pointed out that the relation between the University Colleges and the teachers in elementary schools was not nearly so close as it ought to be, and advocated the proposal that the University Colleges should be placed by the education code in the same position

as training colleges as regards the reception of grants for the training of elementary teachers, provided that satisfactory arrangements were made for instruction in the theory and practice of teaching by the appointment of the requisite additional staff and the provision of the necessary opportunities of practical teaching. This proposal involved the pursuance by students in the training department of a University scheme of study in the non-technical parts of their work. Now it was clear that the examinations of the Education Department were not the most suitable that could be devised for teachers trained at the University Colleges, and that it would be necessary to ask the Department to regard as a substitute for it the certificate of the college obtained by the candidate after fulfilling a prescribed course of study or, better still, the certificate of the three colleges combined for the purposes of examination. But what was this combination of colleges; what but University organisation? It naturally implied the formation of the Welsh University. It was claimed for this method of bringing the colleges into relation with elementary teachers, that it was easy to apply, that it was economical, and that it would mark a distinct advance in the education of teachers; for there is a breadth in University education which a professional college must always fail to reach, however excellent be its teaching. It was further urged, as a collateral advantage, that the scheme successfully carried out would bind together the higher education and the elementary education of the country. The University becomes a familiar thought to the teacher, and therefore also to the boys and girls in the elementary school.

At the close of the discussion, the Cymmrodorion Section passed the following resolution:

‘That in the opinion of the Cymmrodorion Section of the National Eisteddfod, the University Colleges of Wales ought to be placed in the same position as Training Colleges as regards the reception of grants for the training of teachers in elementary schools, provided that satisfactory arrangements are made for instruction in the theory and practice of teaching by the appointment of the requisite additional staff and the provision of the necessary opportunities for practical teaching.’

The discussion and suggestions have been fruitful. They came before the Government with like suggestions made from other parts of the country, and notably, I believe, from Liverpool. In the result Day Training Colleges have been established on the lines laid down. The training department was opened at Cardiff in 1891; and since then similar departments have been established at Aberystwyth and Bangor; and I think I am right in saying that from 220 to 230 teachers were in training last year in the University Colleges of Wales.

But my present purpose is to lay stress on the fact that the need for the University of Wales definitely emerged from the proposal that teachers in elementary schools should be trained at the University Colleges.

Again, when we considered intermediate education, the same need emerged. You will remember that we were in the days when the



Intermediate Education Act was talked of, but not passed. The epoch-making report of the Departmental Committee of 1881 had established at once the deficiencies of our educational system and the keen desire of Wales to have them remedied. After the issue of that report, no one questioned the necessity of remedial legislation. A Welsh Intermediate Education Bill immediately came within the region of practical politics. Nevertheless Wales was a long time getting it. The first Bill was promised in 1884; it was introduced by Mr. Mundella in 1885, and it died in its infancy with the Government that had fathered it. Two Bills were introduced in 1887, one by Mr. Mundella, after discussion with the Welsh Liberal members, and one by Mr. Kenyon. The question had then obtained a position which made it independent of party politics; and the Conservative Government undertook to deal with it in the following year. The Government was unable to redeem its promise. In 1889, however, a Bill was again introduced by Mr. Stuart Rendel (now Lord Rendel), accepted with certain modifications by the Government, and, supported by both political parties, became law before the end of the session.

Now the discussion in the Cymmrodorion Section that I am calling to your mind took place in 1887; and one of the important points we had to consider in connection with the Bills was the nature and constitution of the authority to which the work of inspecting and examining the intermediate schools should be committed. In Mr. Mundella's Bill there was provision for an annual grant from the Treasury to each County Council, not exceeding in amount the sum raised by rate by the County Council for the purposes of the intermediate schools within its jurisdiction; and the amount of the grant to be so made was to depend on the merit of the schools as ascertained by such annual inspection and report as might be required by regulations to be framed from time to time by the Education Department.

The Senate of the University College of South Wales and Monmouthshire had, at the request of the Welsh members of Parliament, considered the matter, and had forwarded to them the following resolution:

'In answer to question eight in the schedule of questions submitted by the Educational Sub-Committee of Welsh members of Parliament, the Senate of the University College of South Wales and Monmouthshire is of opinion that, for the general control of intermediate education, it is desirable that there should be established, in addition to the Welsh Education Commission and the County Boards provided by Mr. Mundella's Bill, a National Education Board. The Board should contain representatives of Her Majesty's Privy Council, the Welsh colleges, the head masters of intermediate schools, and the County Boards. The Senate welcomes the attempt made in Mr. Kenyon's Bill to place the educational system in the hands of central Welsh authorities, but considers it inexpedient to separate North and South Wales for the purposes of the Bill. The National Education Board, as above constituted, should have the control of the schemes of instruction to be pursued in the schools, and have power to frame schemes for their inspection and examination, to award, on the results of such inspection and examination,

such money grants as may be provided by the Bill, and generally to perform the more strictly educational functions in connection with the system of intermediate education. The Board should be brought into close connection with the Welsh University when it is constituted.'

In the event this scheme has been, with slight modifications, adopted; and in all the county schemes power is conferred on County Councils to contribute to the expenses of the Central Intermediate Education Board. Furthermore, the Treasury has signified its willingness to accept the reports of such a Board in regard to the condition of the schools for its purposes in connection with the distribution of county grants. The constitution of the Board has been formulated, and has, I believe, received the assent of the Charity Commissioners and of the Privy Council. It has not, however, yet been laid on the tables of the Houses of Parliament.

Now I had the privilege of pointing out, in our 1887 discussion, that here again the necessity for the University really met us; that the best plan would be to make the Intermediate Education Board part of the University organisation; that practically in England, at the present time, the schools are examined by the Universities; and that it would only be a more definite and outspoken expression of the same system to make the Board, broadly constituted as indicated in the above resolution, a department or special delegacy of the University.

This view commended itself to the Section, and, subsequently, to a representative educational conference summoned by the Cymmrodorion Society, which met at Shrewsbury in January 1888. In my opinion it still remains the best plan that has been proposed. The constitution of the University Court, and the proposed constitution of the Central Intermediate Education Board, are so similar, that it seems hardly worth while to bring both bodies into existence. County Councils, colleges, and schools are sufficiently represented on the University Court to make it capable of discharging all the functions assigned to the Board; and the power to undertake the inspection and examination of schools is specifically conferred on the University in its Royal Charter. Therefore I still urge, in the interests of unity, simplicity, and economy, the plan brought forward eight years ago. It was difficult then, for there was no University. It is easy now, for the University ideal has become a fact.

The third ground on which I advocated the foundation of the University in the discussion, eight years ago, was that the existence of the University is essential to the vitality of our colleges. It is certainly part of the ideal of any University institution that its professors should be leaders in the departments of scholarship or science which they profess, and that, as such, they should help to frame the courses of study leading to graduation. Colleges incorporated in a teaching University have this opportunity. Originality of thought has fuller encouragement, and new educational methods have freer play than can possibly be the case in a college of which the students have no other avenue to a University degree than examination by a wholly external examining body like the University of London, however excellent be the conduct of its examinations.

An atmosphere of intellectual independence is of the essence of true academic life. The true scholar must breathe it as his native air. And this is not the language of mere theory. It has its immediate practical application on the scientific side. The trained student of science, for instance, entering on manufacturing pursuits should do so with free inquiring eye, ready to believe that it may have been reserved for him to make a discovery of immense value to the industry to which he is devoting himself. I believe that this freedom of spirit is far more likely to be developed and fostered in a teaching University than in a college bound to teach on certain rigid lines laid down by an authority in which it has no part. That, then, was the third, and perhaps chief, ground on which I advocated the foundation of the University. I held, and hold, that for true intellectual development Wales must be mistress of its own destiny in matters of academic study and method.

As a result of our discussion, the Cymmrodorion Section passed the following resolution, which was proposed by Professor John Rhŷs, and seconded by Sir Lewis Morris :

‘ That it is the opinion of this meeting that definite action should be taken to impress on Her Majesty’s Government the desire of the Welsh people for the establishment of a Welsh University.’

And it was further resolved later :

‘ That in the opinion of this meeting, a conference of the representatives of colleges, intermediate schools, and elementary schools should be summoned in a convenient place in the near future, and that the Society of Cymmrodorion be requested to take the initiative in convening it.’

This conference was summoned by the Cymmrodorion to meet at Shrewsbury, in January 1888. It sat for two days, and passed the following, among other resolutions :

‘ (a) That in the opinion of this conference it is expedient that the provision for intermediate and collegiate education in Wales and Monmouthshire should be completed by a University organisation ; and (b) that the inspection of state-aided intermediate schools should be committed to the Welsh University, due provision being made for the representation of such schools on its executive body ; (c) that the executive committee should be requested to make arrangements to enable the members of the conference to meet the Welsh peers, and the members of Parliament for Wales and Monmouthshire, at an early date.’

This conference with members of Parliament took place on March 16, 1888. The views of the Shrewsbury conference were laid before them ; assurance was given that they would receive careful consideration, and Lord Aberdare, speaking from the chair, expressed complete approval of the proposals submitted.

In the early part of July 1888, a conference, representing the three University Colleges, met in London and passed the following resolutions :

‘ That this meeting, representing the three Welsh University Colleges, is of opinion that the time has come when these colleges should conjointly apply to the Government for a charter for the establishment of the University of Wales.’

‘ That an application be made to the Government for a charter to constitute a University for Wales on the same general lines as the charter already granted to the Victoria University, with such modifications as may be required by the peculiar conditions and circumstances of Wales.’

In the course of this London discussion a difference of opinion revealed itself. It was held by some that the degree examinations of the Welsh University ought to be, like those of the University of London, open to all comers ; by others, that the degrees of the University ought to imply, not only success in examination, but adequate training for a definite qualifying period in a constituent college of the University, as is the case in all the Universities of England and Scotland, the University of London excepted.

However, in the event, the above resolutions were passed, and it was determined to present them to the Lord President of the Council. They were so submitted on July 15. They were courteously received, but clearly the Government was, as yet, unconvinced. We were, however, invited to prepare a draft charter for submission to the Government in the future.

After this there was a period of delay, owing to the difference of opinion on the nature of the University, to which I have alluded. We rightly felt that further thought and discussion would result in substantial unanimity.

On the one hand, it was urged that the University ought to be responsible for the good teaching of every graduate as well as for examining him ; that the University degree ought to be a guarantee of good training as well as of a successful exhibition of knowledge in particular examinations ; that in connection with all examinations there is a danger of that disturbance of the mental digestion commonly called ‘ cram,’ and that this danger is minimised if the examining body insist beforehand that the person to be examined shall have had sufficient teaching of such quality as to make ‘ cram ’ on his part a superfluity of naughtiness.

On the other hand, it was pointed out that there would be a large number of meritorious students too poor to afford a collegiate training, who would lose the stimulating hope of graduation, if a qualifying period of study at a constituent college of the University were made a condition precedent to admission to the University examinations.

The rejoinder was that such students should be provided for by a scheme of scholarships ; that their real need is University education, which is only to be obtained at a properly equipped college ; and that to offer them anything else is to give them stones for bread.

It was also argued that the University of London already made provision for such students ; and that the Government would be little likely to establish another University to do the same work.



But the difference of opinion was there, and it was well that the solid weight of argument in favour of a teaching University was left to produce its effect before any further step was taken.

There was no new conference until November 8, 1891, when, as a result of a resolution passed by the Court of Governors of the University College of North Wales, representatives of the three University Colleges and of the Joint Intermediate Education Committees of the Welsh counties met at Shrewsbury. It was then found that opinion in favour of a teaching University had greatly ripened; and the first resolution of the conference was as follows:

‘That the University of Wales shall be a teaching University, *i.e.* that no candidate shall be admitted to a degree unless he shall have pursued such a course of study at one of the Colleges of the University as the University Governing Body may prescribe; and that the teachers, or any one or more of them, in each faculty in each college of the University, shall have a substantial share in the original framing and any subsequent modification of the curriculum and scheme of examination.’

This resolution was passed unanimously. After that, progress was assured.

The next resolution was as follows:

‘That the colleges in the University shall be the University Colleges at Aberystwyth, Bangor, and Cardiff; and such other colleges as may hereafter, with the sanction of the Crown, be recognised by the University Governing Body.’

The third resolution was:

‘That powers be sought, enabling the University to give degrees in arts and science, and subsequently in such other faculties, including theology, medicine, law, and music, as may be sanctioned from time to time by the Crown at the request of the Governing Body.’

The fourth resolution was:

‘That it is desirable that provision should be made in the charter for the encouragement of University Extension Lectures.’

The fifth resolution:

‘That it is desirable that the University should have the power of undertaking the inspection and examination of intermediate schools and other educational institutions, and of granting certificates of proficiency in connection therewith.’

The sixth resolution:

‘That in order to secure the speedy establishment of a University on these lines, a committee, consisting of four representatives from each of the bodies composing the conference—the representatives to be nominated by the respective bodies—be appointed to prepare a draft charter of the University, and to submit the same to a subsequent meeting of this conference.’

The Draft Charter Committee so constituted met many times, and completed its task of preparing a draft charter, on the lines laid down in the foregoing resolutions, by the end of 1892. The draft charter was presented to the conference on January 6, 1893, and after full discussion and with slight alteration it was adopted by that body.

Meantime, in the autumn of 1892, the Government, aware of the steps we were taking, appointed Mr. O. M. Edwards, of Lincoln College, Oxford, to report on the condition of the colleges in relation to the proposal for University organisation. Mr. Acland, to whom Wales owes much in matters of education, had announced in November 1892, at the opening of the library of the University College of Wales, Aberystwyth, that it was the intention of the Government to ask Mr. Edwards to prepare such a report. The report was not published, but I have heard, on the best authority, that we have every reason to be grateful to Mr. O. M. Edwards for the service rendered by it to the cause we had in hand.

The Government was thus prepared for our petition, praying that Her Majesty should found the University of Wales by a Royal Charter in conformity with the draft charter accompanying it. This petition was presented soon after Easter 1893, and, after the usual formalities, the charter received the Royal Signature on November 23, 1893.

It is not for me to-night to apportion praise to the many workers in the cause. All members of the Draft Charter Committee and Conference bent themselves in single-minded endeavour to secure for Wales a University suited to her needs and capable of being made by faithful effort her intellectual crown. But I should perhaps, be guilty of omission, were I to leave some names unmentioned.

First and foremost comes the name of the late Lord Aberdare, who was chairman of Conference and Committee. Lord Aberdare was commander-in-chief of the Welsh educational army; and his election to be first Chancellor of the University was but an outward recognition of a leadership long since inwardly felt; it was the salutation of those who had followed him to victory. We had marched under his guidance, confident in his wisdom and helped at all turns by the influence he so rightly possessed. He passed away in ripe old age, full of loving care and consideration for all sorts and conditions of men, leaving us the legacy of a great example. It is good to know from his own assurance how glad it made him to be Chancellor of the University he had done so much to create. He lived to see the framework of Welsh education completed. He had a large share in its making, and his name will be freshly remembered with each telling of the tale in years to come.

I must mention, too, William Rathbone, who, though an Englishman, is one of the best and most generous friends of Welsh education, and who would now be Senior Deputy Chancellor of the University, but that, with a modesty and self-depreciation we deplored, he declined what would have been the unanimous request of the University Court; and Isambard Owen, whom this society knows well for other services to education in Wales; one who, were he not a

physician, might have been a great lawyer, so nice is his appreciation of a difference and so perfect his gift of expression, and who is now Senior Deputy Chancellor of the University ; Cadwaladr Davies and Ivor James, the secretaries of the Conference, of whom the former is one of the Honorary Counsel and the latter the Registrar of the University ; my brother, Brynmôr Jones, who turned our draft charter into a model legal document, and who is now Honorary Counsel to the University ; and Maynard Owen, a brother of the Deputy Chancellor, who as solicitor piloted the draft charter through the mysterious regions of the Privy Council Office.

The record I have given to some extent explains the nature of the University which has been established. But there are some points in its constitution of which I should wish to make special mention. The first is the representative character of the Governing Body—the University Court. The charter recognises that the University is matter of concern to the community as a whole, and, with a view of rendering the popular interest in the proceedings of the University vital and securing to the University the services of able and representative men cognisant of the circumstances of all parts of Wales, it directs that the County Councils of Wales shall nominate twenty-six members of the Court—rather more than one-fourth of the whole body. The Courts of Governors and Councils of the Colleges, themselves largely representative of the public bodies of Wales, nominate twenty-one more. So that there is ample guarantee that the University Court shall be equipped with all necessary knowledge of the educational requirements of every part of Wales.

In the next place, there is the most ample recognition that the University is matter of concern as much to the women as to the men of Wales. Wherever, without exception, in our charter and statutes words importing the masculine gender are used, they are to be interpreted as importing the feminine likewise.

In approaching the charter, statutes, and degree regulations of the University of Wales, it is necessary to abandon the view of University functions, that makes the University a mere examining body—a view which is apt to rise in the minds of those who are familiar only with the work of the University of London. In founding the University of Wales we have endeavoured to bring into existence a University which should do much more than this. The objects of its founders have been :

(i.) To ensure that all students of the University should receive good teaching and thorough training before proceeding to graduation. In other words the University is to concern itself with the education of its students, and not merely with testing their knowledge by examination on particular occasions.

(ii.) To give the teachers of the University such freedom in their treatment of the subjects they profess as will enable them to give the students the best that is in them.

(iii.) To give the students, as far as may be consistent with the duty of the University to guide their studies, freedom of choice as regards the departments of learning to which they will devote themselves.

(iv.) By these means to make of the University a real force for

the advancement of learning in Wales ; to enable both teachers and students to breathe a freer intellectual atmosphere, remote from the attitude which our past relationship with the University of London tended to foster, the attitude in which studies are looked upon as so much preparation for examinations. Such an attitude is one of irreverence to the knowledge that is being acquired ; and the new University ought to do much to wake in us all the sense that the duty and dignity of a scholar lies in free effort to prepare for original thought on his part in the department of his choice, and for the devotion of his trained powers to the efficient transaction of the affairs of life.

The charter has established a teaching University. I suppose that, sixty years ago, such an adjective would have been a superfluity. Before that time, I imagine, it had not entered the mind of man that there could be a University that does not teach. But the adjective is not without meaning since the establishment of Universities discharging only the function of examination, Universities of which the University of London may be taken as a type.

Under the provisions of the charter of the University of Wales, the Senate of the University, consisting of the heads of departments in the Constituent Colleges, is charged with the preparation of a general scheme of University study to be submitted to the Court for its approval and sanction. Each Constituent College is entitled to propose for the consideration of the University Senate special schemes of study, which must from the conditions of the case fall within the general scheme ; and the Senate may approve them or refer them back for amendment in any specified particular or particulars. If and when the Senate approves the schemes so presented to it, it will forward them to the Court for its consideration ; and the Court by its sanction may make them schemes of University study. It is not required of the Court that the schemes of study in all the colleges shall be identical ; but the Charter strictly charges the Court, in case of divergence, to preserve equivalence.

Further, all candidates for degrees must, during a certain period of years, called the 'qualifying period,' pursue in a constituent college of the University an approved scheme of study called a 'qualifying scheme' ; and every candidate must before admission to a degree satisfy the University examiners in examinations corresponding to his qualifying scheme. It is prescribed by statute that the qualifying period of study shall not be less than three academic years.

The Charter provides that the examinations of the University shall be conducted by external and internal examiners, but that no candidate shall be held to have satisfied the examiners unless he has satisfied the external examiners.

To enter into the details of the degree regulations would lead me too far ; and it is not necessary for me to do so, for they are now published in provisional draft, and speak for themselves.

I have told the history of the foundation of the University at some length, because it is an admirable record of work in which all parts of Wales joined hands together to achieve an object long



present as ideal in the minds of Welshmen. Achievement has waited on action, perhaps, sooner than we dared to hope; and herein there is a lesson which I believe we are learning. The foundation of the University has brought together the North and South, has done much to obliterate a traditional divergence, and has, I believe, quickened the determination of Welshmen to let no local jealousies or small considerations introduce divided counsels and unworthy discord into their pursuit of noble national aims.

And I have told the story for another reason—because I hope new efforts may result from seeing how a great plan logically conceived in all its details may soon pass into the region of accomplished fact. It is useless to pursue an abstraction as an abstraction. 'He that seeketh his life shall lose it' is as true of a nation as of an individual. Our national aims must be definite and concrete; our national life lived or it eludes us.

I hope for new efforts at concrete aims; and I would set our politicians this definite problem—to secure for Wales a representative central authority with large funds at its disposal to be expended year by year in the development of the social and intellectual life of the people. I should like to expand on this theme, and may do so on some other occasion. At present I leave it mere *obiter dictum*.

My discourse to-night has been a discourse on educational machinery and its development. The work that is done is small in comparison with the work that remains to do. Wales has to breathe life, animation, activity, into the framework she has achieved; and the first condition of success is faith in herself—a real faith, not a faith expressed merely in words, but a living faith finding issue in deeds. I believe in the national genius of the Welsh people, and in their capacity to make their University respected among the universities of the world; and I would say to the public bodies of Wales and to all Welshmen—'Have faith in your University; if you have not, none else will; have faith in the wisdom of its governing body, in the efficiency of its colleges, the high standard of its examinations, and the value of its degrees as a testimony to training and attainments. The foundation of your University confers on you a new power; it confers on you, also, a new responsibility. Make your University what it should be, and never err by want of confidence in your power to make it great.'

Let us address ourselves to our task with faith in the star of Wales, with belief in the Welsh genius, with conviction in regard to the possibility of characteristic national development on the intellectual side; and let us frankly, and without fetter, devote ourselves to building up a free national University in full exercise of the powers conferred on us. A national life is not so much to be talked about as to be lived. Our opportunity is come on the intellectual side. What sort of life is our life to be? Is it to be marked by abundant vitality from the outset—free and confident? Or is it to be timid, hesitating, shrinking, a life of self-distrust? Can anyone who has watched the educational development of Wales in this 'glad confident morning' doubt the answer?

In the event, Welshmen and Welshwomen will be brought, as never before, face to face with the advanced learning of the world,

and they will approach it in such spirit as will stimulate them, as they have never before been stimulated, to strive and strain themselves to add to it. Our little land, small though it be, may become a land renowned through the world and the ages, being found worthy to contain within itself some of the sources of the river of Divine Truth.

Lord Kenyon has most kindly made it possible to give the latest facts concerning the subject of Chapter VIII, and of the last appendix, by giving leave to reprint here his report, entitled :

#### A BRIEF SURVEY OF THE WORK OF THE UNIVERSITY OF WALES

The present, when the second quinquennial visitation has lately been held, would seem an opportune time to lay before the Court a brief statement as to the work which has been and is being done by the University and its constituent Colleges. Before going into details, however, it may be of help if the essentials of university education are touched upon.

These are well set out in the final report of the Royal Commission on University Education in London, in which it is laid down, in the first place, that the regular students of the University should be able to work in intimate and constant association with their fellow students, not only of the same but of different faculties, and also in close contact with their teachers. In the second place, the work done in a university by teachers and students should differ in its nature and aims both from the work of a secondary school and that of a technical or a purely professional school. Knowledge is, of course, the foundation and the medium of all intellectual education, but in a university knowledge should be pursued not merely for the sake of the information to be acquired, but for its own extension and always with reference to the attainment of truth. Modern universities are called into existence principally by the social need for professional training, and probably most of the students enter the University with a purely utilitarian object ; but they should find themselves in a community of workers devoted to the pursuit of knowledge for its own sake, and tenacious of this ideal against all external pressure of material and social advantage. In the third place, it is essential that the higher work of the University should be closely associated with the undergraduate work. These essentials may be said to be those of the first function of the University—the imparting of knowledge and the encouragement of research.

A National University, like the University of Wales, has, too, a second function, and that is to pay special attention to what pertains to national life and character, and to promote and foster national intellectual movements.

Dealing with what I have described as the first function of the University, as regards the ordinary degree work, the number of Graduates taking initial degrees in Arts, Science, Law, Music, and Divinity, in the five years ending last summer were :

	B.A.		B.Sc.		LL.B.	B.Mus.	B.D.
	Honours	Pass	Honours	Pass			
1909-1913 ..	529	360	..	114	181	..	3 .. 5 .. 24
	889			292			

The numbers in 1913 were higher than in any previous years, and there are at the present time at the three University Colleges some 1400 students.

The more important question perhaps (as affording a truer test of the vigour and vitality of a University) is the encouragement afforded to research and the extent to which it is pursued. The change during the recent quinquennium, as compared with the one before, has been most marked in this respect and has been largely due to the additional grant which the Treasury gave the University in 1909 for Fellowships and Postgraduate Studentships. The institution of these latter especially has afforded a preliminary training ground for research which has had excellent results—among these being the higher standard obtainable for the Fellowship work than formerly.

Since 1909, twenty graduates have been working as Fellows in different branches of research. Forty-three graduates within the same period have held Postgraduate Studentships and have pursued two years' courses of higher study on approved subjects either at the Colleges or other centres. Of the higher degrees—involving more or less research work—the following are the statistics for the five years :

M.A.	M.Sc.	LL.M.	D.Litt.	D.Sc.	M.Mus.
93	24	1	1	5	1

The work submitted for University degrees, it may be remarked, represents only a part of the work in research and higher study done in the Colleges. As an instance, the change in Cardiff College during this last quinquennium and especially during the last year or two has been immense in this respect. That College has submitted the following return of original papers and works published by Members of the College Staff or Graduate Students during the four years ending June 1913 :

	1910-1912	1912-1913	Total
Arts and Science .. ..	31	44	75
Music (original composition)	41	29	70
	72	73	145
	145		

This is five times the number of works as compared with the preceding quinquennium.

As regards the work the University does to advance the intellectual interests of Wales, the National language and history play a considerable part in the higher work of the University. Of the twenty who have been engaged in Fellowship work, four were working on Welsh subjects. Out of 43 Postgraduate Studentships, eight were in the department of Welsh. Out of 93 M.A.

dissertations, 34 dealt with Welsh language or history. The only D.Litt. degree yet obtained was for a work on Welsh history.

The University has already become an Academy for Welsh Literature. It is due to it that the much needed reform in Welsh orthography has become recognised and enforced.

The organ of advanced thought (Literature, Philosophy, Criticism, Theology) in Wales—the *Beirniad* (quarterly)—was started and is exclusively maintained by the three Colleges.

The dramatic movement in Wales is particularly identified with the University. The recent dramas produced, dealing with Wales, have been written and produced by Graduates of the University. The Dramatic Societies in Wales are practically all connected with the University.

The chief prizes at the Eisteddfod have for the last ten years fallen in a large measure to graduates of Wales or members of the College staffs, and the University has been largely drawn upon for adjudicators.

It is recognised by all critics that the present revival of Welsh literature was started and maintained by the influence of the University.

Research into Welsh history and Grammar has been led by members of the University, and publications by members of the University form the most considerable contribution to Welsh History and Welsh Linguistics which has been made during the last thirty years at home and abroad. It is the University that has made possible the scientific History and Philology of Wales. The scientific study of Welsh Medieval literature was absolutely non-existent before the Colleges took it up.

The number of students who have secured posts which require highly specialised scientific knowledge illustrates the fact that the Colleges have adapted their curriculum to modern needs. A notable advance for furthering the careers of Welsh Students, who have passed through the University, has been made by the formation of the Appointments Board for Wales, which has already been instrumental in starting many graduates upon their careers in life.

Some notes as to the Colleges, having regard more particularly to local conditions, follow.

A correlated scheme for literary, historical, and scientific research into the natural and economical history of Wales and especially of the area served by the University College at Aberystwyth is being gradually developed. Practically the whole of this work has been undertaken during the last five years, and it has already resulted in the publication of a large number of valuable theses and memoirs.

A Chair of Colonial History has been founded at Aberystwyth, and a class of Paleography has been instituted. Mainly owing to the efforts of this College, a Board of Legal Education for Wales has been recently founded and the study of Law has for the first time been placed on a sound footing in the Principality.

The Summer School of Studies together with the tutorial classes for working men represent the effort of the Aberystwyth College to provide advanced instruction to persons who are unable to



pursue the prolonged course of study in the University. The Summer School has been the means of revolutionising the study of geography in Welsh schools.

There has also been a distinct advance during the period in the opportunities for the study of Art and Music. By the generosity of an anonymous donor the sum of £500 per annum has been placed at the disposal of the College for the encouragement of instrumental music. It may also be stated that the impetus given to the study of the drama during many years has been one of the chief elements in the development of the modern dramatic movement in Wales. The Old Students Association of the College has undertaken the publication of the best of the works, two of which have already been published.

A reference may be permitted to one of the notable pieces of constructive educational work now proceeding in Wales.

The Medical School at Cardiff was established in connection with the University College of South Wales and Monmouthshire twenty-one years ago. That school, however, had not been equipped to provide tuition beyond the first three years of the usual five years medical course. Despite this, the success of the Cardiff Medical School, as tested by the achievements of its pupils at the London Hospitals and at the University, has been very striking.

135 former students have obtained medical qualifications at London University and elsewhere.

29 gold medals and distinctions have been won in open competition at the University of London.

36 entrance scholarships into the London Hospitals have been won by Cardiff students in open competition.

It is claimed that no other Medical School can show such a distinguished record.

Sir William James Thomas has promised a sum of £30,000, and it has been announced that an anonymous donor would provide the £60,000 necessary to complete the buildings of the proposed School, while the Treasury has been approached for a State grant towards the maintenance fund of the School. Much still remains to be done, but the omens are favourable, and all who are in any degree interested in the progress of educational effort in Wales will realise the extreme importance of this movement which has thus sprung into the realm of practical politics.

Perhaps the most important event in the history of the North Wales College during the last five years has been the removal of the Arts and Administrative Departments, the Arts Library, and the Museum to the new buildings, of which the foundation stone was laid by the late King Edward VII in 1907, and which were formally opened by His Majesty the King in 1911. While the College is still in the main a non-residential institution, so far as the men students are concerned, it has been found possible to take two important steps in the way of meeting the need for common residential life. Last year a small Men's Hostel was opened, which will be somewhat extended in the course of this year. The establishment of a kitchen department in the new buildings has made it possible to provide a daily college dinner for staff and

students, of which about 60 members of the College regularly avail themselves.

Important new departures have taken place at Bangor in the Agricultural Department, as the result of the large funds available for this purpose under the Development Act. Advisors in Agricultural Chemistry and Agricultural Botany have been appointed and provided with laboratories in the old buildings. A Live Stock Officer has been appointed, and the Professor of Forestry has been relieved of a large part of his teaching work in order to enable him to advise the owners of woods and plantations in Wales as to the management of their timber. Within the last few weeks a new system of Extension work in Agriculture under the direction of the College has been established in the counties of Anglesey, Denbigh, and Flint. The three counties by increasing their contribution from the rates to Agricultural Education have qualified to receive a still larger amount from the Development Fund, with the effect that the total sum to be spent on Agriculture in these counties has risen from £800 to £2,122. An Agricultural Organiser has been appointed by the College for Anglesey and another for Denbigh and Flint jointly. In addition, an instructress in Dairying and Poultry Keeping has been appointed for Anglesey and an Instructor in Horticulture for the College area generally. At Aberystwyth, too, the grant from the Development Commissioners has enabled the study of Agriculture, and especially the advanced work in this Department, for the first time, to be placed on a sound footing.

During the last three years Tutorial Classes for Workers have been held at Bethesda, Blaenau Festiniog, Llanberis, and Penygroes. The attendance at these classes, even under great difficulties, has been most gratifying and the work in each is to be continued for the fourth year.

Advantage was taken in 1913 of the excellent facilities afforded by the new buildings to hold two Summer Schools, the one conducted by the Welsh Language Society and the other by the North Western District of the Workers Educational Association. The latter Summer School has been held again at Bangor during this summer.

The work of the Agricultural Departments at Aberystwyth and Bangor, the Law Department at Aberystwyth, the Forestry and Electrical Engineering Departments at Bangor, and the Engineering, Mining, and Metallurgy Departments at Cardiff indicates that the University is prepared to provide advanced instruction of a specialised kind. Mention may be made of the work on aviation carried on in the Department of Applied Mathematics and Physics at Bangor, and of interest, too, is the relief model of Wales which is being constructed at Aberystwyth on the scale of one mile to the inch.

With the assistance of the Principals and Registrars of the three constituent Colleges, it has been possible to compile an index of the original works of the Professors, Lecturers, Graduates, and Students of the University during the last five years. Many of these have been published, and in some cases the writers are recognised as authorities on their particular subjects. One at

least has been translated into German and the author has received the gold medal of the Aeronautical Society.

In spite of careful inquiry, this list is probably incomplete. To those authors whose names and works are omitted apology is due, and as compiler I shall be glad to be informed of such omissions.

The University owes much to her Professors, many of whom have given freely of their working lives for her advancement, and unselfishly have not sought promotion elsewhere. A Federated University, and the University of Wales is the only one now existing, has many difficulties to contend with and some inevitable redundancy of teaching. In two of her three constituent Colleges she provides almost entirely for a rural population. Their students, who are poor have come mainly from elementary schools, and taking all these things into consideration the University of Wales does not fear comparison nor shrink from criticism.

From the commencement the University has been seriously hampered in its work by lack of funds. Extension and development are possible and desirable, but for such developments additional funds are imperative. The question of making higher grants is now under consideration by the Treasury. It is to be hoped, as the result of the report of the Advisory Committee upon the work of the last five years, that these will be forthcoming, so that the University may be able, in the words of its first Royal Chancellor, 'to offer additional incentives to the continuous pursuit of knowledge, and to aim at those particular forms of mental activity which are most in harmony with the genius and instincts of Wales, and which will best enable its inhabitants to assist in furthering the interest of the civilised world.'

As I write, the call to arms has become the imperative duty of Welsh University students as of other young men of Great Britain, and nobly are they responding to the summons. From the ranks of the Officers Training Corps of the three Colleges many students have received commissions, and many more have joined the ranks. All honour to them! Their studies may be delayed, but their minds will be enlarged, and we trust they will return invigorated to add lustre to their country, their university, and their college.

KENYON,  
Senior Deputy Chancellor.

*October 1914.*





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